

IN THE

Supreme Court of the United States

OCTOBER TERM, 1978

No. 78-

78-468

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE,
Petitioner,
v.

UNITED STATES NUCLEAR REGULATORY
COMMISSION

and

UNITED STATES OF AMERICA,
Respondents.

**APPENDIX TO THE PETITION FOR
A WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE FIRST CIRCUIT**

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**United States Court of Appeals
For the First Circuit**

No. 77-1419

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE,
v. Petitioner,

UNITED STATES NUCLEAR REGULATORY
COMMISSION,
and
UNITED STATES OF AMERICA,
Respondents.

SOCIETY FOR THE PROTECTION OF
NEW HAMPSHIRE FORESTS,
Intervenor.

DECREE
Entered June 21, 1978

This cause came on to be heard upon petition for review of an order of the Nuclear Regulatory Commission, and was argued by counsel.

Upon consideration whereof, It is now here ordered, adjudged and decreed as follows: The petition for review is dismissed.

A True Copy

By the Court:

ATTEST:

DANA H. GALLUP, *Clerk*

DANA H. GALLUP, *Clerk*

By FRANCIS P. SCIGLIANO
Chief Deputy Clerk.

By FRANCIS P. SCIGLIANO

Chief Deputy Clerk.

United States Court of Appeals For the First Circuit

No. 77-1419

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE,

PETITIONER,

v.

UNITED STATES NUCLEAR REGULATORY
COMMISSION, ET AL.,

RESPONDENTS,

SOCIETY FOR THE PROTECTION OF
NEW HAMPSHIRE FORESTS,

INTERVENOR.

PETITION FOR REVIEW OF A DECISION OF THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

Before COFFIN, Chief Judge,
CAMPBELL and BOWNES, Circuit Judges.

Thomas G. Dignan, Jr., with whom *R. K. Gad III*, *John A. Ritsher*, and *Ropes & Gray* were on brief, for petitioner.

Harry H. Voight, *James P. McGranery, Jr.*, *Robert S. Faron*, *LeBoeuf, Lamb, Leiby & MacRae*, *Peter A. Marquardt*, and *Charles W. Campbell* on brief for Edison Electric Institute, The Detroit Edison Company, and Public Service Company of Indiana, amici curiae.

Stephen S. Ostrach, Attorney, Office of the General Counsel, United States Nuclear Regulatory Commission, with whom *Jerome Nelson*, General Counsel, *Stephen F. Eilperin*, Solicitor, *Richard S. Mallory*, Attorney, Office of the General Counsel, United States Nuclear Regulatory Commission, and *Peter R. Steenland, Jr.*, Chief, Appellate Section Land and Natural Resources Division, United States Department of Justice, were on brief, for respondent.

Robert A. Backus, with whom *Harvey Winchester* and *O'Neill Backus Spielman Little* were on brief, for Society for the Protection of New Hampshire Forests, intervenor.

June 21, 1978

BOWNES, Circuit Judge. Petitioner, Public Service Company of New Hampshire (PSCO), challenges the propriety of the Nuclear Regulatory Commission's¹ (Commission) order to reroute certain transmission lines tying the proposed Seabrook Nuclear Power Station (Seabrook) to the New England 345 KV transmission grid. PSCO maintains that the order, drawn so as to minimize environmental injury, is beyond the scope of the Commission's power. PSCO asserts that the Commission's organic statute, specifically section 271 of the Atomic Energy Act of 1954, 42 U.S.C. § 2018,² denies it the authority to designate such routing and that the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321 *et seq.*, cannot confer jurisdiction otherwise denied an administrative agency. PSCO also claims that, in issuing the order, the Commission impermissibly preempted state authority.

The question we address, *viz.*, whether the Commission properly can assert jurisdiction over the routing of transmission lines running forth from the nuclear reactor, is one of first impression. At issue is the location of approximately two of the 86 miles of transmission lines that will emanate from Seabrook. The cost of the rerouting represents a miniscule fraction of the total facility costs. The underlying question of the Commission's authority is, nonetheless, an important one.

¹ The Energy Reorganization Act of 1974, 42 U.S.C. §§ 5801 *et seq.* divided the responsibilities which had previously been held by the Atomic Energy Commission into two bodies. The licensing and related regulatory functions of the AEC were transferred to the Nuclear Regulatory Commission (NRC); the operation of government nuclear research and production facilities was lodged with the Energy Research and Development Administration (ERDA). 42 U.S.C. §§ 5814(c), 5841(f), 5842. We use the word "Commission" to refer both to the AEC and its regulatory successor, the NRC.

² The pertinent statutory language is set out, *infra*, at page 12.

We start with a statement of the background, then discuss NEPA, follow with an analysis of the Commission's jurisdiction, and finally comment on the question of preemption.

Background

PSCO requested certification of its selected site and facility from the New Hampshire Public Utilities Commission, as required by state law. NH RSA § 162-F (Supp. 1975). After lengthy hearings which started on June 19, 1972, and included over 5,800 pages of testimony, the certificate was granted by the Public Utilities Commission on January 29, 1974.³ The certificate included the siting of three transmission lines along the routes proposed by PSCO. In its authorization the Public Utilities Commission added that the approved routes could be later modified upon request, "should meaningful negotiation with responsible local authorities, regional commissions, etc. result in any beneficial route relocations."

PSCO then submitted its plans for the nuclear facility and transmission lines to the Atomic Safety and Licensing Board.⁴ The routing for the lines generally followed the

³ The actual procedure followed was that hearings were held before the New Hampshire Bulk Power Facility Site Evaluation Committee (NHSEC) and the Public Utilities Commission. NH RSA 162-F:7 (Supp. 1975). The NHSEC then made conclusive findings and sent those findings to the Public Utilities Commission, NH RSA 162-F:8 (I, II) (Supp. 1975), which is charged with the responsibility for issuing the certificate of site and facility, once assured that the construction will not unreasonably adversely affect the natural environment. NH RSA 162-F:8(I) (Supp. 1975).

⁴ Applications for licenses are first heard by an Atomic Safety and Licensing Board, 42 U.S.C. § 2241, 10 C.F.R. § 2.721, which may grant or deny issuance of the license. Any aspect of that decision may be appealed by any party to an Atomic Safety and Licensing Appeal Board, 10 C.F.R. § 2.785(a), 10 C.F.R. § 2.762, which enjoys all the powers of review of the Commission. See generally Murphy, *Atomic Safety and Licensing Boards: An Experiment in Administration Decision Making on Safety Questions*, 33 Law & Contemp. Prob. 566 (1968). Petition for review of the

routes previously submitted to and *conditionally approved* (see discussion on preemption, *infra*, at 16) by the New Hampshire Public Utilities Commission. After extensive hearings, the Licensing Board approved PSCO's application with two exceptions. The Board conditioned the Seabrook permits on the rerouting of one of the lines around the Pow Wow River-Cedar Swamp rather than PSCO's proposed route directly through it. The Board reasoned that the Pow Wow River-Cedar Swamp was an area containing "relatively dense or pure stands of the Atlantic White Cedar, a species found only in the Atlantic coastal regions . . . which is becoming increasingly scarce as its available habitat is reduced by economic development." The Board also found the marshlands to be an important habitat and flight lane for migratory waterfowl; because of the Pow Wow River, the area is surrounded by an extensive marshland complex, making it one of the few extensive river-marsh ecosystems in southeastern New Hampshire. The Swamp environs are recognized as a natural area by the New England Natural Areas Inventory. Intervenor in this action, the Society for the Protection of New Hampshire Forests, has approximately 10-15% of the area under its protective ownership, and uses the area, as do campers, canoeists and youth groups, for nature outings. The Board found that PSCO's proposed transmission corridor through the mid-point of the marsh, using two 200-foot high steel lattice-work towers, would result in a diversion of a significant number of migratory waterfowl from the Swamp and would constitute a "visual insult" to the relatively pristine area. The Board proposed a dogleg which would

Appeal Board decision may be sought before the Commission itself. 10 C.F.R. § 2.786, as amended, 42 Fed. Reg. 22128, effective June 1, 1977. The Licensing Board issued its initial decision, ordering the change in routes, on June 29, 1976; on July 26, 1977, the Appeal Board affirmed the order; on September 15, 1977, the Commission declined review, thus leaving in effect the order of the Licensing Board as affirmed by the Appeal Board.

skirt the edge of the natural area and would use 75-foot wooden H-frames, compatible with the surrounding forest.

The Licensing Board also directed that the second line under dispute be routed directly through the Packer Bog, rather than the previously approved route which would skirt the edge of the Bog, but would require the cutting of white cedar. PSCO itself indicated that it preferred the route directly through the Bog, but complains before this court that the Board could not have "ordered" it to adopt this route.⁵

NRC's Responsibility Under NEPA

The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321 *et seq.*, articulated a mandate to federal agencies to "use all practicable means" to avoid environmental "degradation," and to preserve "natural aspects of our national heritage" to the extent consistent with "other essential considerations of national policy" 42 U.S.C. § 4331(b). *See also* Federal-Aid Highway Act of 1962, 23 U.S.C. § 138; Department of Transportation Act of 1966, 49 U.S.C. § 1653(f). Congress directed federal agencies to consider "to the fullest extent possible" the environmental impact of their policies, regulations, and actions. 42 U.S.C. § 4332. This charge is "neither accidental nor hyperbolic." *Flint Ridge Dev. Co. v. Scenic Rivers Assn.*, 426 U.S. 776, 787 (1976). NEPA is activated whenever a major federal action may significantly affect the human environment. 42 U.S.C. § 4332(2)(C). Licensing

⁵ Intervenor Society for the Protection of New Hampshire Forests had urged that the Licensing Board either require PSCO to avoid the Pow Wow River-Cedar Swamp area entirely or construct a larger dogleg around the marsh. The Licensing Board rejected Forests' routes because the increased cost for the Swamp dogleg would not be justified by the minimal environmental improvement. Forests argued that on the second line, PSCO should avoid the Packer Bog completely. The Board noted, in rejecting Forests' route, that it might prove less expensive overall, but that it would increase the visual impact in the Town of Greenland, New Hampshire.

of a nuclear power station by a federal regulatory commission is a major federal action. *NRDC v. NRC*, 547 F.2d 633, 638 (D.C. Cir. 1976), *rev'd on other grounds sub nom. Vermont Yankee Nuclear Power Corp. v. NRDC*, 46 U.S. L.W. 4301 (Apr. 3, 1978). *See also* 40 C.F.R. § 1500.5(a)(2); Murphy, *The National Environmental Policy Act and the Licensing Process: Environmentalist Magna Carta or Agency Coup de Grace?*, 72 Colum. L. Rev. 963, 966-967 (1972).

NEPA's mandate has been given strict enforcement in the courts, with frequent admonitions that it is insufficient to give mere lip service to the statute and then proceed in blissful disregard of its requirements. *See, e.g., Flint Ridge Dev. Co., supra*, 426 U.S. at 787-788; *County of Suffolk v. Secretary of Interior*, 562 F.2d 1368, 1389 (2d Cir. 1977), *cert. denied*, 46 U.S.L.W. 3518 (February 21, 1978); *Silva v. Lynn*, 482 F.2d 1282, 1287 (1st Cir. 1973); *Calvert Cliffs' Coord. Com. v. AEC*, 449 F.2d 1109, 1117 (D.C. Cir. 1971). Section 102(a)(C), 42 U.S.C. § 4332(a)(C), is an "action forcing" provision, *Kleppe v. Sierra Club*, 427 U.S. 390, 409 (1976); *Greene County Planning Board v. FPC*, 455 F.2d 412, 415 (2d Cir.), *cert. denied*, 409 U.S. 849 (1972), which imposes a duty upon federal agencies to act so as to effectuate the purposes of the statute to the fullest possible degree. *See* 115 Cong. Rec. (Part 30) 40416, 40419 (1969). The directive to agencies to minimize all unnecessary adverse environmental impact obtains except when specifically excluded by statute or when existing law makes compliance with NEPA impossible. *Flint Ridge, supra*, 426 U.S. at 787-788; *Calvert Cliffs, supra*, 449 F.2d at 1115 and n.12; 40 C.F.R. § 1500.4(a); 115 Cong. Rec. 39703 (1969).⁶ As stated by the court in *Calvert Cliffs*, "Unless

⁶ NEPA provides the congressional mandate to force "timely and comprehensive consideration of non-radiological pollution effects in the planning of installations []", *New Hampshire v. AEC*, 406 F.2d 170, 176 (1st Cir.), *cert. denied*, 395 U.S. 962 (1969), which was previously missing.

[specific statutory] obligations are plainly mutually exclusive with the requirements of NEPA, the specific mandate of NEPA must remain in force.” 449 F.2d at 1125. Unless there are specific statutory provisions which necessarily collide with NEPA, the Commission was under a duty to consider and, to the extent within its authority,⁷ minimize environmental damage resulting from Seabrook and its transmission lines.

Does the NRC's Organic Statute Bar The Commission From Exercising Any Authority Over Transmission Lines?

We examine the Commission's organic statute, 42 U.S.C. §§ 2011 *et seq.* and 42 U.S.C. §§ 5801, 5841-5849, to determine whether there is an inevitable clash between it and the exercise by the Commission in this instance of its NEPA-mandated duty. Both the Atomic Energy Act of 1954 and the Energy Reorganization Act of 1974 confer broad regulatory functions on the Commission and specifically authorize it to promulgate rules and regulations it deems necessary to fulfill its responsibilities under the Acts. 42 U.S.C. § 2201(p). In a regulatory scheme where substantial discretion is lodged with the administrative agency charged with its effectuation, it is to be expected that the agency will fill in the interstices left vacant by Congress. *See Phillips Petroleum Co. v. Wisconsin*, 347 U.S. 672 (1954); *Henry v. FPC*, 513 F.2d 395, 402 (D.C. Cir. 1975). The Atomic Energy Act of 1954 is hallmarked by the amount of discretion granted the Commission in working to achieve the statute's ends. The Act's regulatory scheme “is virtually unique in the degree to which broad responsi-

⁷ The Commission cited *Henry v. FPC*, 513 F.2d 395 (D.C. Cir. 1975), for the proposition that NEPA enlarges the proper scope of an agency's jurisdiction. We need not address that question since we find that transmission lines are within the proper scope of the agency's jurisdiction. *See* discussion, *infra*, “A. The Commission's Interpretation.”

bility is reposed in the administering agency, free of close prescription in its charter as to how it shall proceed in achieving the statutory objective.” *Siegel v. AEC*, 400 F.2d 778, 783 (D.C. Cir. 1968). The agency's interpretation of what is properly within its jurisdictional scope is entitled to great deference, *Power Reactor Co. v. Electricians*, 367 U.S. 396, 408 (1961); *Nader v. NRC*, 513 F.2d 1045, 1055-56 (D.C. Cir. 1975), and will not be overturned if reasonably related to the language and purposes of the statute. *Hardin v. Kentucky Utilities Co.*, 390 U.S. 1, 8 (1968); *NLRB v. Hearst Publications*, 322 U.S. 111, 131 (1944); *Bangor and Aroostock Ry. Co. v. ICC*, No. 77-1082, slip op. 10 n.8 (1st Cir. Mar. 30, 1978).

A. *The Commission's Interpretation*

The crucial issue here is the Commission's interpretation of the term “utilization facility.”⁸ The Commission has been granted explicit authority by Congress to expand upon the statutory definition: “The term ‘utilization facility’ means . . . (2) any important component part especially designed for such equipment or device as determined by the Commission.” 42 U.S.C. § 2014(cc). Pursuant to its rule making authority, the Commission issued the following definition:

“Utilization facility” means any nuclear reactor other than one designed or used primarily for the formation of plutonium or U-233.

Note: Pursuant to subsection 11v. and 11cc. [42 U.S.C. § 2014(v), (cc)], respectively, of the Act, the Commission may from time to time add to, or otherwise alter, the foregoing definitions of production and utilization facility. It may also include as a facility an

⁸ It is illegal to build or use any utilization facility except in accordance with a license issued by the Commission. 42 U.S.C. § 2131.

important component part especially designed for a facility....

10 C.F.R. § 50.2(b).

At least since 1968, the Commission has included in its working definition of "utilization facility" both the nuclear reactor and "equipment associated with a nuclear reactor" since "associated equipment may be integral to the operation of a reactor and . . . such equipment can have nuclear safety significance." *Philadelphia Electric Company* (Peach Bottom Atomic Power Station Units 2 and 3), 4 AEC 109, 111-112 (1968). In *Detroit Edison Company* (Greenwood Energy Center, Units 2 and 3), ALAB-247; 8 AEC 936 (1974), the Commission construed utilization facility to include transmission lines running forth from the nuclear plant, affirming the broad interpretation given in *Peach Bottom*. This posture by the Commission has been steadily maintained ever since. See, e.g., *Virginia Electric & Power Co.* (North Anna Nuclear Power Station, Units 1 and 2), ALAB-325, NRCI-76/4 404 (April 16, 1976), petition for review dismissed sub nom. *Culpeper League for Environmental Protection v. NRC*, Nos. 76-1484 and 76-1532 (D.C. Cir. March 16, 1978); *Kansas Gas and Electric Company* (Wolf Creek Nuclear Generating Station, Unit No. 1), 5 NRC 1 (1977).

In light of the Commission's longstanding reliance on this definition, and its seemingly reasonable relation to the language and purposes of the statute, it is incumbent on the petitioner to point out in what manner the interpretation given by the Commission is so contrary to the purposes of the regulations or statute as to warrant intervention and correction by this court. See *Northern Ind. Pub. Serv. Co. v. Walton League*, 423 U.S. 12, 14-15 (1975). This, petitioner has failed to do. PSCO's petition, in essence, is a collateral attack on the Commission's determination that "utilization facility" includes transmission

lines. This is a particularly inappropriate forum in which to launch such an attack. There is nothing in the material before us which suggests the propriety of our deciding, in the complete absence of any factual background on the subject, that the Commission erred in asserting that transmission lines are properly construed as coming within the definition of "utilization facility." Cf. *Gage v. AEC*, 479 F.2d 1214, 1220-1221 (D.C. Cir. 1973). We are mindful of the broad grant of authority given to the Commission in making such determinations, see 42 U.S.C. § 2014(cc)(2), and the deference due this determination. *Power Reactor Co., supra*, 367 U.S. at 408; cf. *Vermont Yankee Nuclear Power Corp. v. NRDC*, 46 U.S.L.W. 4301, 4305-4306 (April 3, 1978). Naturally, nothing precludes PSCO, or any interested person, from petitioning the Commission to amend or rescind its determination that "utilization facility" includes equipment associated with a reactor, such as transmission lines. See 10 C.F.R. §§ 2.802 and 2.803.

B. *The Commission and Congress*

As noted, *supra*, since 1968, the Commission has claimed the authority to assert jurisdiction over equipment associated with a nuclear reactor and, at least since 1971 (when regulations relating to transmission lines were first proposed), has claimed the specific right to oversee the siting of transmission lines.⁹ While ordinarily, silence on the part of Congress regarding activity by an administrative agency should not be liberally read as approval, in the case of the Commission, inaction by Congress has been read as "*de facto* acquiescence in and ratification of the Commission's

⁹ It is pertinent to mention that the exercise by the Commission of jurisdiction over transmission lines has been inferentially assumed correct in other court decisions. See *Culpeper League for Environmental Protection v. NRC*, Nos. 76-1485 and 76-1532 (D.C. Cir. March 16, 1978). Cf. *Gage v. AEC*, 479 F.2d 1214 (D.C. Cir. 1973).

licensing procedure by Congress." *Power Reactor Co.*, *supra*, 367 U.S. at 409.¹⁰ See also *New Hampshire v. AEC*, 406 F.2d 170, 174 (1st Cir.), *cert. denied*, 395 U.S. 962 (1969); 42 U.S.C. § 2252. This is due to the unusual oversight by the Joint Committee on Atomic Energy¹¹ regarding the Commission's activities, a special relationship which, as we noted once before, is "rarely embodied in positive law." 406 F.2d at 174. For ten years, the Commission has given an expanded reading to the term "utilization facility" to include equipment associated with a nuclear reactor.¹² In light of the special statutory relationship between the Commission and the Joint Committee, and in view of the Supreme Court's comments in *Power Reactor*, we think it fair to posit that had Congress viewed this as an unwarranted expansion of jurisdiction, restrictive action would have been taken. Compare, Note, *The*

¹⁰ The Court in *Power Reactor* placed importance on the fact that the interpretation being challenged had been brought to the attention of the Joint Committee on several occasions. 367 U.S. at 408. There is nothing in the record before us to show whether the definition of "utilization facility" as including equipment associated with a nuclear reactor has been questioned before the Joint Committee. However, in light of the strong mandate to exercise supervision over the Commission and the onus placed on the Commission to keep the Joint Committee "fully and currently" informed of all of its activities, 42 U.S.C. § 2252(a), it is not unreasonable to assume that the Joint Committee has been apprised of the Commission's definition.

¹¹ On September 20, 1977, the Joint Committee was abolished and all functions previously performed by it were transferred to committees of the Senate and House of Representatives having jurisdiction over the subject matter previously overseen by the Joint Committee. 42 U.S.C. § 2258, Pub.L. 95-110 § 1, 91 Stat. 884.

¹² In addition, the Commission published its regulations dealing specifically with environmental considerations of the transmission lines in the Federal Register, *see e.g.*, 36 Fed. Reg. 22,848 (Dec. 1, 1971) and 37 Fed. Reg. 5745 (Mar. 21, 1972). The regulations appear in 10 C.F.R. § 50.10(e)(1)(iv). The regulations were promulgated to implement NEPA, *see Gage v. AEC*, 479 F.2d 1214, 1215 (D.C. Cir. 1973), following the *Calvert Cliffs* decision that prior Commission regulations inadequately complied with NEPA requirements.

Central Intelligence Agency: Present Authority and Proposed Legislative Change, 62 Va.L.Rev. 332, 364-370 (1976).

C. 42 U.S.C. § 2018

We next turn our attention to petitioner's contention that section 271 of the Act, 42 U.S.C. § 2018, is a positive bar to the Commission's exercise of any jurisdiction over transmission lines. The pertinent language in the statute reads:

Nothing in this Act shall be construed to affect the authority or regulations of any Federal, State, or local agency with respect to the generation, sale, or transmission of electric power produced through the use of nuclear facilities licensed by the Commission

Petitioner interprets this to mean the Commission is barred from asserting any authority over transmission lines. We cannot agree. In the first place, even were there a proscription (which there is not) against the Commission's exercise of jurisdiction over transmission of electricity, such proscription would not necessarily run to the exercise of jurisdiction over transmission lines. In the second place, the language of section 271 is that of maintaining the authority of *other* agencies; it is not a back-handed manner of withdrawing jurisdiction of the Commission over subjects properly within its ambit. The section is a statement that the Commission will not preempt existing authority in the areas mentioned. Petitioner's flawed interpretation can perhaps best be exposed by extending its reading to the entire section, and not just to the word "transmission." If we were to adopt petitioner's position that section 271 operates as a positive bar, then it must perforce extend to the entire section, *viz.*, the Commission is also barred from maintaining jurisdiction over the *generation* or sale of electricity. Since commercial nuclear power plants' *raison d'être* is to generate electricity and since they are constructed to perform this function, petitioner's

strained reading of section 271 would mean that the Commission is barred from any exercise of jurisdiction over the very plant itself. We think this result demonstrates the fundamental error in PSCO's interpretation.¹³

That the interpretation suggested by PSCO is not warranted can be seen as well from a review of the legislative history of section 271. In light of the prior monopolistic control by the federal government over all aspects of nuclear energy, there was concern by certain senators that the new grant of authority to private industry to develop nuclear power for generation of electricity might mean that the traditional regulatory bodies would be displaced. There was particular worry that the Federal Power Commission might be ousted from regulating electricity produced by nuclear energy. Much of the debate on section 271 revolved around this preoccupation. While being assured by the sponsor of the Act, Senator Hickenlooper, that section 271 saved to the Federal Power Commission its regulatory role for electricity produced by nuclear power, Senator Humphrey finally prevailed in urging the Senate to pass section 272, 42 U.S.C. § 2019, which does so in specific language. Nothing in the floor debates suggests that section 271 was other than a garden-variety nonpreemption clause. See 100 Cong. Rec. 12015-12021, 12196-12201 (1954).¹⁴

¹³ See also 42 U.S.C. § 5847 which directs the Commission to conduct a national survey for future nuclear energy sites. In making the survey, the Commission is instructed specifically to include consideration of transmission line rights-of-way. This suggests again that PSCO's reading of section 271 as a total bar to the exercise of *any* jurisdiction over transmission lines is untenable.

¹⁴ Excerpts from the Senate debates underscore the interpretation of section 271, 42 U.S.C. § 2018, as a nonpreemption section. Mr. HICKENLOOPER. [§ 271] is designed to keep the regulatory authority exactly as it is now, traditionally and under the law.

.... Mr. HUMPHREY. What [§ 271] really means . . . is that there is nothing in this act that denies the Federal Power Commission the right to regulate. That is what it means, but

As we note *infra*, this case does not present a situation where federal and state authority are in conflict. The New Hampshire Public Utilities Commission has indicated a willingness to be flexible in the routes PSCO may use for the transmission lines, and the Commission has at this juncture done nothing more than require PSCO to take advantage of this flexibility to minimize adverse environmental impacts. The Commission's order did not preempt the Public Utilities Commission's authority, but rather complemented it. We need not decide, therefore, whether section 271 might apply to a situation where the state agency with authority over siting has an irreconcilable conflict with the Commission, as this case does not present that problem.

D. *The Commission's Right to Condition Licenses*

We turn now to a consideration of whether it was error for the Commission to condition its approval of PSCO's license application on the use of the Commission-approved

it does not say how, and what [I] want[] to be sure is that the "how" on electrical energy created by atomic matter is the same "how" that is on hydro-generated electricity; that is all.

.... Mr. HUMPHREY. What the act provides now is a broad grant, saying that there is nothing in the act that will deny a Federal agency from regulating it. That is not good enough; that is what the Senator from Minnesota calls a negative authorization of potential authority.

.... Mr. HICKENLOOPER. What section 271 does is to make clear that this act does not interfere in any way with the jurisdiction of the Federal Power Commission over such activities, or with State agencies where they have jurisdiction, or with local agencies where they have jurisdiction.

It is not an authority given in a negative way. It is a positive negation of any intent by this statute to interfere with the existing laws and the existing authorities, State and Federal, that have to do with electricity.

100 Cong. Rec. 12015, 12016, 12197 (1954).

routes.¹⁵ Our preceding analysis compels the finding that there is no "clear and unavoidable," *Flint Ridge*, *supra*, 426 U.S. at 788, statutory conflict which would prohibit the Commission from complying with NEPA's mandate.¹⁶ Once having found that the Commission has jurisdiction over the transmission lines, we think it clear that, under the dictates of NEPA, it was obliged to minimize adverse environmental impact flowing therefrom.¹⁷ We quote Judge Wright from the *Calvert Cliffs* opinion, "[c]learly, it is pointless to 'consider' environmental costs without also seriously considering action to avoid them." 449 F.2d at 1128. The Commission has statutory authority to condition licenses. 42 U.S.C. §§ 2131, 2133(a), 2233. *Cf.* 5 U.S.C. § 551(9); *North Anna Env. Coalition v. NRC*, 533 F.2d 655, 658 (D.C. Cir. 1976). In this instance, the Commission used one of its statutory powers in the furtherance of NEPA, whose mandate the Commission must follow. The Commission is under a dual obligation: to pursue the objectives of the Atomic Energy Act and those of the National Environmental Policy Act. "The two statutes and the regulations promulgated under each must be viewed in *para* [sic] *materia*." *Citizens*

¹⁵ Petitioner concedes that there is adequate record support for the finding that the Commission's routes, on a cost/benefit basis, are superior; it maintains nonetheless that the Commission should not have ordered it to adopt said routes.

¹⁶ We, therefore, find no conflict with *Kitchen v. FCC*, 464 F.2d 801 (D.C. Cir. 1972), where the court found no NEPA obligations to attach to matters expressly outside the statutory jurisdiction of the administrative agency. The instant case is clearly distinguishable, since we agree with the Commission that it does have the requisite jurisdiction over the lines.

¹⁷ To the extent that PSCO argues that the Commission should have "determined" the environmental impact of the transmission lines and, even finding them unnecessarily harmful to the environment, should have accepted them, it is clearly wrong. While one of the purposes of the environmental impact statement is to serve as an environmental full disclosure law, *Silva v. Lynn*, 482 F.2d 1282, 1285 (1st Cir. 1973), NEPA requires more. *Calvert Cliffs*, *supra*, 449 F.2d at 1128.

for *Safe Power v. NRC*, 524 F.2d 1291, 1299 (D.C. Cir. 1975). We find that the Commission correctly discharged its responsibilities here.

Has There Been Preemption?

Petitioner finally presses us to find that the order by the Commission has impermissibly preempted state regulatory authority by ordering a route different from that approved by the New Hampshire Public Utilities Commission. We easily dismiss this argument. As the Public Utilities Commission stated in its approval, the routes could later be modified upon request if necessitated by negotiation with other agencies. It held specifically that the authority to construct was conditional upon PSCO's obtaining the "necessary construction and operating permits and/or licenses from the U.S. Atomic Energy Commission." Since one of the routes submitted to the Commission by PSCO differed from that previously approved by the New Hampshire Public Utilities Commission, we find it surprising that PSCO should now argue that the state-approved routes were final and binding and that any change authorized by the Commission is in direct conflict with the State of New Hampshire. Indeed, PSCO stated before the Commission that approval from the state for the different route would be "relatively easy to obtain." Petitioner thus clearly anticipated that the Public Utilities Commission would entertain a request to alter the approved routes. Furthermore, at oral argument the Commission stated that, should PSCO be unable to obtain approval of the new routing from the New Hampshire Public Utilities Commission, it could come back to the Commission. We, therefore, find no ineluctable conflict between New Hampshire and the Commission on this question. It appears that the matter has been purposely left in a fluid state so that head-on collision between the federal and state regulatory bodies could be

averted. Moreover, PSCO's contention that there is preemption by the Commission is seriously undermined by the fact that the State of New Hampshire is not a party here to contest the purported arrogation by the Commission of state authority.

The Supreme Court, in analyzing statutes to ascertain whether preemption by the federal government has occurred, has looked to such factors as whether the state and federal authority is conflicting; contrary to; repugnant to; irreconcilable with; inconsistent with; in violation of each other. *See Perez v. Campbell*, 402 U.S. 637, 649 (1971); *Florida Avocado Growers v. Paul*, 373 U.S. 132, 142-143 (1963); *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941); *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 39 (1824). *See also Massachusetts v. United States*, 46 U.S.L.W. 4280 (Mar. 29, 1978). We cannot find a preemption issue on so skimpy a basis as that presented here. The posture of the case before us suggests no "inevitable collision," *Florida Avocado Growers, supra*, 373 U.S. at 143, between the authority exercised by the Commission and that by the New Hampshire Public Utilities Commission.

The petition for review is dismissed.

[3 NRC 857]

LBP-76-26

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

ATOMIC SAFETY AND LICENSING BOARD

JOHN M. FRYSIK, Chairman

MARVIN M. MANN

ERNEST O. SALO

IN THE MATTER OF
PUBLIC SERVICE COMPANY
OF NEW HAMPSHIRE, ET AL.
(SEABROOK STATION, UNITS 1 AND 2)

DOCKET Nos. 50-443
50-444

June 29, 1976

Upon application for construction permits for Seabrook Station, Units 1 and 2, the Licensing Board issues its initial decision, making findings of fact and conclusions of law and authorizing the issuance of construction permits for both units, subject to several conditions.

TECHNICAL ISSUES DISCUSSED:

Organization and management; seismic design criteria; evacuation plan; condenser cooling system effects; need for power; impact of plant upon tourism; and consideration of alternatives.

INITIAL DECISION (Construction Permit)

APPEARANCES

ELEANOR D. ACHESON, Esq., THOMAS G. DIGNAN, Jr., Esq., and JOHN A. RITSHER, Esq., for the Applicants.

ROBERT A. BACKUS, Esq., for Intervenor Seacoast Anti-Pollution League, The Audubon Society of New Hampshire, and Society for the Protection of New Hampshire Forests.

ANTHONY Z. ROISMAN, Esq., DAVID S. FLEISCHAKER, Esq., KARIN P. SHELDON, Esq., and STUART BLUESTONE, Esq., for Intervenor New England Coalition on Nuclear Pollution.

MS. ELIZABETH H. WEINHOLD, *pro se*.

NORMAN C. ROSS, Esq., for Intervenor Donald B. Ross.

DONALD W. STEVER, JR., Assistant Attorney General, for the State of New Hampshire.

ELLYN R. WEISS, Deputy Assistant Attorney General, for the State of Massachusetts.

FREDERIC S. GRAY, Esq., THOMAS M. BRUEN, Esq., and MICHAEL W. GRAINEY, Esq., for the U.S. Nuclear Regulatory Commission.

[3 NRC 885-890]

G. Transmission Lines

Intervenor Forests contends that the transmission line routes proposed by the Applicants will cause unreasonable environmental degradation in light of available alternatives (Third Prehearing Conference Order, ¶ 30).

114. A total of three transmission lines operating at 345 KV will be required to deliver the power generated by the two Seabrook units to the New England 345 KV transmission grid (ER, § 3.9.1; FES, § 3.8.2, § 4.1.2; Tr. 9066-70, 9073-75). Applicants' proposed lines may be described as follows: The first line runs in a generally northerly direction from the facility to the so-called Newington Station (hereinafter the Seabrook-Newington line); the second line runs generally westerly from the facility to the so-called Scobie Pond substation (hereinafter the Seabrook-Scobie line); and the third runs generally southwesterly across the New Hampshire-Massachusetts border and thence to the so-called Tewksbury substation (hereinafter the Seabrook-Tewksbury line). The original proposed routings of these lines are shown on maps in the ER. (ER, § 3.9; Figs. 3.9-1, 3.9-1A)

115. As a result of hearings held by agencies of the State of New Hampshire, an order was issued on January 29, 1974, by the NHPUC which ordered the issuance of a Certificate of Site and Facility for the New Hampshire portion of the three lines, which, with some small variations, were the same as those proposed in the ER. It is these routes which, with a possible minor variation in the routing of the Seabrook-Newington line in an area known as "Packer Bog," Applicants now propose to utilize. (NHPUC, Dkt. No. D-SF6205 *Public Service Co. of N.H. Seabrook Nuclear Power Plant, Certificate of Site and Facility, Commission Report and Order No. 11,267, January 29, 1974, Order No. 11,267 and PUC Appendix 3* — official notice taken at Tr. 8077; Applicants' Exs. 17A, 18)

116. In addition to the proposed routes, the Applicants have described two overall alternate routings for the three lines (ER, § 10.9). "Alternate No. 1" would do away with the Seabrook-Tewksbury line and have two lines running parallel in a westerly direction from the facility to Scobie Pond substation on the same route as the proposed Seabrook-Scobie line, and then two lines on a common right-of-way running generally southeasterly from the Scobie Pond substation to the Tewksbury substation. (ER, § 10.9, p. 10.9-1; Fig. 10.9-1)

117. Alternate No. 1 has been rejected by Staff and Applicants due to the major environmental and aesthetic impact caused by the routing of two transmission lines through the Pow Wow River-Cedar Swamp Natural Area (Applicants' Testimony, post TR. 8081, p. 7; FES, § 9.2.4, p. 9-13).

118. "Alternate No. 2" as proposed would do away with the Seabrook-Scobie line and would have two lines running parallel in a generally southwesterly direction from the facility to the Tewksbury substation on the same route as the proposed Seabrook-Tewksbury line, and then one line running generally north northeasterly from Tewksbury substation to the Scobie Pond substation (ER, § 10.9; Fig. 10.9-2).

119. A study conducted by Applicants revealed that "Alternate No. 2" as proposed would have a detrimental effect on system stability and that consideration of system stability dictated that the second line from Seabrook to the Tewksbury substation as contemplated by "Alternate No. 2" would have to electrically by-pass the Tewksbury substation and extend to, and terminate at, the so-called Sandy Pond substation (hereinafter referred to as "Alternate No. 2" with the Sandy Pond extension) (FES, p. A-9; Fig. A4.1-2; FES, p. A-19; Applicants' Testimony, post Tr. 9239, pp. 1-4; Tr. 8304).

120. Adoption of the scheme of "Alternate No. 2" with the Sandy Pond extension would require the expenditure of more than \$21,000,000, exclusive of right-of-way costs, in excess of the cost of the three-line scheme as originally proposed by the Applicants (FES, p. A-11; Applicants' Testimony, post Tr. 9239, pp. 4-8 and Sheets 1-9).

121. Staff recommends that Applicants' proposed routings be approved with the exception that, with respect to the Seabrook-Scobie line, the Applicants should be required to "dogleg" the line around an area known as Cedar Swamp which lies along the Applicants' proposed route (FES, p. iv, § 4.1.2, pp. 4-4, 4-6; Fig. 4.2; § 9.2.4, pp. 9-13; Tr. 9673-77).

122. The Seabrook-Newington line will, upon leaving the switchyard, run northerly along a railroad right-of-way in part across the Hampton-Seabrook marsh a distance of approximately 2.25 miles until it reaches a corridor occupied by extant 34.5 KV lines owned by another utility. At that point, the line turns westerly along that corridor for a distance of about 2 miles at which point the line turns northerly to run on a new corridor parallel to, but separate from, an existing PSCO 34.5 KV corridor for a distance of about 0.75 miles where it then links up with the existing PSCO 34.5 KV corridor and proceeds northerly for about 2.25 miles into the northern part of the municipality of North Hampton, New Hampshire. At this point, the Seabrook-Newington line jogs northwesterly for a distance of about 0.75 miles, then back in an easterly direction a distance of about 2.25 miles. The line then turns generally northerly and runs about 2.5 miles through the southeast corner of the Town of Greenland, New Hampshire, across the Greenland-Portsmouth, New Hampshire border, skirting the fringes of Packer Bog to the southeast and joins an extant 115 KV corridor running between Scobie Pond substation and Newington Station and proceeds along that corridor in a generally northerly direction for a distance of about 5 miles to Newington. The total line length is approximately 18 miles

and covers a straightline distance of approximately 14 miles. (Applicants' Exs. 17A, 18)

123. Applicants have indicated a preference to deviate from the proposed Seabrook-Newington route in the area of Packer Bog. As approved by the New Hampshire Site Evaluation Committee, the line would skirt the southeasterly edge of the Bog. Because this route would possibly require the cutting of white cedar located on the edge of Packer Bog (Tr. 8135), Applicants would prefer to go straight through the Bog itself (Tr. 8135-36, Applicants' Ex. 18). This route would avoid the cedar and also would mean construction on a higher and drier strip of land than that encompassed in the Site Evaluation Committee route (Tr. 9046-49, 9128-29).

124. The proposed Seabrook to Scobie line runs westerly from the station on a new corridor in a generally westerly direction a distance of some 12 or 13 miles to approximately the border between the towns of Kingston and Danville, New Hampshire. The line then turns northwesterly and, with one jog, runs generally northwesterly approximately 4.5 miles through Danville to the existing Scobie Pond-Newington corridor. The line then follows this corridor a distance of about 9 miles in a west southwesterly direction and then jogs westerly a distance of about one mile to join an extant 345 KV corridor (The Maine Yankee line) which it follows southwesterly about 1.75 miles into Scobie Pond substation. The total line length is about 28.75 miles, to cover a straight line distance of 25-26 miles. (Applicants' Ex. 17A)

125. Only a small portion of the proposed Seabrook-Tewksbury line lies in New Hampshire. The line proceeds westerly from the station parallel on a common corridor with the Seabrook-Scobie line a distance of about 5.5 miles to a point in South Hampton. It then turns and runs about 6 miles southerly crossing the New Hampshire-Massachusetts border, and proceeds to the so-called West Amesbury

substation. At this point, it picks up an existing 115 KV corridor and follows that corridor a distance of about 23 miles to a point (Dracut Junction) where it joins an existing 115-230 KV corridor and proceeds southerly along that corridor a distance of about 4.8 miles, to Tewksbury substation. Total line length is 39-40 miles, to cover a straight line distance of 28-29 miles. (Applicants' Ex. 17A)

126. The configuration proposed by the Applicants, as well as all alternatives discussed herein, assumes the existence of two other 345 KV lines: one from Tewksbury substation to Scobie Pond substation, which Applicants indicate to be a future system requirement which will be built with or without Seabrook; and a second line from Tewksbury to Sandy Pond which is already under construction, towers already having been erected, the right-of-way cleared, and awaiting only the stringing of conductors. (Tr. 8093-95 as corrected Tr. 8294-95; Tr. 9106)

127. The Pow Wow River-Cedar Swamp environs, comprising an area of approximately 1,000 acres (SPNHF Ex. 2, p. 3), is recognized as a natural area by the New England Natural Areas Inventory, funded by the New England Regional Commission (SPNHF Ex. 1, p. 2), and by the New Hampshire State Soil Conservation Service and the New Hampshire State Planning Office (Tr. 8912). The Society for the Protection of New Hampshire Forests has approximately 10-15% of this area under its protective ownership, which includes 50-60% of the dense or pure stands of the Atlantic White Cedar in this area (Tr. 8237). Through the center of this Natural Area flows the Pow Wow River, surrounded by both sides by an extensive freshwater marshland complex. This kind of extensive river-marsh ecosystem is very uncommon in southeastern New Hampshire — the nearest being approximately 100 miles away along the Merry Meeting River. (SPNHF Ex. 2, p. 6; FES, p. 4-5; Tr. 8229, 8557, 10148-10150) The Area contains relatively dense or pure stands of the Atlantic White Cedar, a species

found only in the Atlantic coastal regions of the United States, which is becoming increasingly scarce as its available habitat is reduced by economic development (FES, p. 4-5; Tr. 9614-9615, 10148-10150).

128. Because of the existence of the Pow Wow River marshlands, this area is an important habitat and flight lane for migratory waterfowl and thus is one of the few areas in New Hampshire used by the Department of Fish and Game for its pre-season waterfowl studies and census (SPNHF Ex. 2, p. 3; Tr. 10133-10134). The Pow Wow River marshlands measure approximately 1,400 feet across, where the Applicants' proposed route lies, and approximately 1.4 miles in length, north and south (Tr. 10114-10116). This is a flat expanse of floating and marshy vegetation, bisected by the Pow Wow River (Tr. 8557-8562; Applicants' Ex. 15). Across this expanse of marsh, there is an unobstructed view until the forest edge begins (Tr. 10114-10121). The only man-made structures visible are a few earth-colored duck blinds used by frequent duck hunters in season (Tr. 10117). No artificial structures are visible above the top of the surrounding trees, which are roughly 70 feet high (Tr. 10118, 10123).

129. The Society for the Protection of New Hampshire Forests is presently developing a series of nature trails and guided tours on its land (SPNHF Ex. 4, Part II), over which the lines will cross. The area is used by campers and canoeists and occasional youth groups (Tr. 8026, 8559, 8564-5, 9636-9638, SPNHF Ex. 4, pp. 6-7). Except during the hunting season, it is a relatively uncrowded and peaceful area. As the population and economic development of this region increases, the recreational value of this relatively pristine area will increase.

130. The Applicants' proposed transmission corridor would cross the Pow Wow River marsh about midpoint along its north-south length at one of its widest points (Applicants' Ex. 15, Tr. 8512, 8513). The crossing would

be effected using two approximately 200-foot high steel lattice-work towers. The towers and the related transmission lines would be visible from most vantage points along the edge of the marsh as well as from the Pow Wow River.²⁴

131. The Staff's proposed minimum circumference dogleg would pass through the surrounding forest and across scattered gravel pits, skirting the edge of the Natural Area (Tr. 10125, 10118-10127, 8239-8241). The supporting structures would be wooden H-frames (with the exception of the steel tubular shaft angle structures) which would blend in with the forest.²⁵ These structures would be approximately 75 feet high and would not be visible above the tops of adjacent trees (Tr. 8134, 10122-10123, 10125). The dogleg would not present any wide open vistas to visitors to the Pow Wow River—Cedar Swamp Natural Area (Tr. 10125).

132. Potential adverse effects from the Applicants' proposed construction methods can be alleviated with the Staff's minimum circumference dogleg, as the land on both sides of the river at the dogleg crossing is dry, forested land (Tr. 10121-10122). The cleared right-of-way the dogleg would pass through should provide sufficient room for the construction of berms or ditches to prevent construction runoff from reaching the river.²⁶

133. There is a residual possibility that the Applicants' proposed construction methods may prove infeasible, requiring the placement of transmission structures in the

²⁴ SPNHF Ex. 2, pp. 8-10. It is noted also that the span between the towers is about 2,275 feet and the lines would be about 50 feet above the marsh at their lowest point.

²⁵ ER, p. 10.9-1, Tr. 8140, Tubular steel poles are also more aesthetically pleasing than steel lattice towers. Tr. 9307.

²⁶ The right-of-way will be 170 feet wide. ER, Amendment #1, p. 3.9-1. However, it is doubtful that crossing the Pow Wow River using wooden H-frame structures will give rise to the need for any dewatering near the river's edge, as H-frame structures require no foundation. Tr. 9299, 9340, 9214-5, 9121-2.

marsh itself (Tr. 9133-9137) and or the movement of heavy equipment into this natural area.

134. The presence of the lattice-work towers and associated transmission lines proposed by Applicants could cause significant numbers of the migratory waterfowl who use the Pow Wow River marsh as a feeding area and flight lane to avoid this natural area (Tr. 9758-9762, 9766-9767). This avoidance behavior is based on visual cues and can cause birds to fly off laterally from the disturbed area (Tr. 9759-9762, 10134-10135), the result being a loss in suitable habitat for migratory waterfowl and thus a proportionate reduction in population of the affected species (Tr. 9758-9759, 9766-9767, 10133-10134). This impact could be particularly significant in southern New Hampshire where river marsh habitat is rare.

135. Use of the Staff's proposed dogleg would require the cutting of some cedar (Tr. 9581-83, 9783, 9785); the increased economic cost, depending upon the dogleg chosen, would range between \$400,000 and \$1,300,000 (Tr. 8933-39). A through route for access by people and off road vehicles such as snowmobiles would result (Tr. 8941). Herbicides would have to be used on the right-of-way (Tr. 9022, 9034-35). The net benefit for the dogleg is that it would remove a visual insult from Cedar Swamp (Tr. 8945-46, 9464-9803).

136. Turning to the Seabrook-Newington line, Forests advocates a route which would avoid Packer Bog altogether by having the line jog to the north and west prior to reaching Packer Bog to join the existing 115 KV Scobie-Newington corridor and following that corridor into Newington (Forests Ex. 8, p. 4, and Attachment Nos. 4, 5; Forests Ex. 3, pp. A1-A2). Adoption of such a route would increase visibility (Tr. 8916-19, 9053-54) in the Town of Greenland, New Hampshire. Assuming parallel construction is used, the cost of Forests' route may be cheaper overall than the NHPUC or PSCO routes (Tr. 9168-75).

137. Based on the foregoing, the Board finds that Applicants' proposed routes, including that route directly through Packer Bog, are acceptable with the exception that, in the Pow Wow River-Cedar Swamp area the Staff's minimum circumference dogleg should be followed.

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[3 NRC 932-935]

I. NEPA Responsibilities

In accord with the requirements of 10 CFR 51 and with prior rulings of the Commission and the Appeal Board, we have fully considered and made findings on the broad issue of need for power and its sub-issues. Nevertheless, we wish to point out certain problems the Board finds with the nature of the issue and the difficulties that it imposes on parties and Licensing Boards.

First of all we suggest that the question of need, or lack thereof, for a specific power plant is, or should be, merely one small facet of an overall policy in regard to energy needs, resources, and considered allocation of resources to their best uses. There being no official national policy, or regional policies, with respect to energy and allocation of resources, the decisions of licensing boards in individual cases have, it seems to us, the effect of setting energy policy to a substantial degree. The question in our view is whether an individual licensing proceeding is the proper forum in which to decide an issue which is really national in scope.

In this connection we note with interest the following remarks of the Licensing Board in the Nine Mile Point 2 proceeding (*Niagara Mohawk Power Corporation*, RAI-74-6, AEC 7, 1074-75, 1974):

In view of the complex issues involving the need for power and energy conservation, it is warranted to comment on the ramifications of the application of NEPA in these areas. Section 102(2)(C) of NEPA provides that

a federal agency shall prepare a detailed statement of "alternatives to the proposed action" and Section 102(2)(D) states that federal agencies shall "study, develop, and describe appropriate alternatives to recommended course of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." In addition, Section 102 of NEPA has been interpreted as requiring the federal agency to weigh the economic and environmental costs against the economic and the environmental benefits of the proposed action in determining whether to go forward with the action. *Calvert Cliffs Coordinating Comm. v. AEC*, 449 F. 2d 1109 (D.C. Cir. 1971) This is the so-called cost-benefit analysis.

The need-for-power review in impact statements apparently became a general practice because meeting the rising demand for power could be used as a dominant factor in the cost-benefit analysis. The difficulty with this reasoning is that this benefit does not relate to the need for power from the specific plant but relates to the need for power on the company's system. In other words, establishment of a need for power on the system does not dictate that a particular type plant be used to meet the need. Moreover, if the utility fails to establish a need for power on its system, then the logical conclusion of the need-for-power rationale is that the construction permit should be denied. This, however, ignores the fact that there may be other valid reasons for construction, such as generating costs, availability of various fuels and conservation of versatile resources.

In light of the above, a question can be raised of whether it is appropriate for the Agency to consider the need for power on a utility's system in an individual licensing proceeding. In this connection, determinations of the need for power and need for the plant could be viewed as matters which should be left to the utility's manage-

ment, which must exercise its business judgment to discharge its obligation to provide reliable electrical service. It might be proper if there was a national or regional energy policy, to determine in a licensing proceeding if a utility is complying with such policy. However, the Board does not know of any energy policy on these matters, and it does not seem appropriate for licensing boards, in ruling on permits for construction and operation of individual plants, to set energy policy on a case-by-case basis.

If determination of the need for power is a business decision, then, in the Board's opinion, it should not be a factor in the Agency's NEPA considerations and is inappropriate as an issue in licensing proceedings. This, of course, would not be in line with accepted practice in licensing proceedings and would be contrary to the holding in *Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station)*, ALAB-179, RAI-74-2, 159, 175 (February 28, 1974), where the Atomic Safety and Licensing Appeal Board explicitly ruled:

At the outset, inquiry must be made into whether there exists a genuine need for the electricity to be produced. This inquiry involves not only analysis of existing generating capacity and of projections of expected growth, but also consideration of the possibility that measures to curtail consumption will be initiated.

The Board suggests that review and possible revision of the agency's present position on inclusion of the need-for-power issue in Licensing proceedings should be seriously considered. This Board does not have the option here to change that position as it is bound by the Appeal Board's *Vermont Yankee* ruling.

• • •

The use of an alternative basis for justifying construction of a nuclear plant was recognized by the Appeal Board when it further stated in *Vermont Yankee*:

At the same time, however, cognizance can be taken of the effect which a shortage of fossil fuel, or a need to divert that fuel to other uses, might have upon demand for non-fossil fuel, or a need to divert that fuel to other uses, might have upon demand for non-fossil fueled generating sources. [*Id.*]

In consideration of the remarks above, we distinguish between determination of the broad "need for power" issue and two distinct categories of "alternatives" to the proposed action, (1) "alternative energy sources" and (2) alternative sites and other alternative design measures with respect to environmental impact of the plant. The first category clearly is closely related to the need for power issue in that certain energy sources such as solar power or other emerging technologies might in some circumstances be found capable, if provided, of supplying at least a portion of the power for which the proposed plant is intended. But, short of governmental action beyond the Board's power, if a Board should decide that such alternative sources could supply sufficient power that the proposed plant need not be built, it has no power to assure that the alternative sources will indeed be made available. In such a case, the Board would be compelled to make a business and economic judgment that the alternate sources will appear, a judgment which might best be left to other entities. In other words, is a licensing proceeding the proper forum for business judgment or determination of energy policy? We respectfully suggest that it is not.

As for the second category, it seems clearly intended to provide a mechanism whereby the environmental impact of a proposed plant can be evaluated and appropriate measures to minimize the impact can be considered. Consideration of such matters in a licensing proceeding is in our opinion proper and consistent with the spirit and intent of NEPA.

In view of the foregoing, it may be useful to consider whether a "major federal action," for which NEPA requires

detailed environmental statements, might for federally managed and/or financed projects be treated differently than federal licensing actions.

For a federally managed or financed project more or less complete control is in the hands of the government. After full environmental review and evaluation, the government can decide on and implement such measures, including any alternatives of either category, as it deems appropriate and consistent with the overall cost-benefit balance of the project.

In some contrast, a licensing proceeding involves environmental review and evaluation of a project proposed and financed by private persons, and which in addition to economic and business constraints also is subject to various forms of regulatory control by other federal, state, and local bodies. In deciding on need for power and/or alternative energy sources, a Licensing Board inevitably would be deciding some points over which other bodies have control and may be in contradiction to their policies or procedures. Of course, this is not so for issues which the Board is required to address and rule upon under the Atomic Energy Act.

In short, it appears that a Licensing Board has the power to deny a license, but not to order alternatives such as other modes of generation or modes of conservation. In other words, a Board's power appears to be essentially a negative power insofar as the issues under discussion are concerned. This would appear to raise the question, is it, therefore, useful to go through the exercise, which often is lengthy, tedious, complex, and expensive, merely to affirm an otherwise licensable plant or to offer in denial conclusions that have no effect other than to veto a plant?⁴⁷

⁴⁷ The futility of the issues discussed here in a licensing proceeding for an individual plant is highlighted by the fact that a utility can build a different type plant if its application for a nuclear facility is denied.

In raising the foregoing questions this Board is aware of and sympathetic to the difficulties of all agencies in the responsible interpretation and implementation of NEPA. We suggest no subversion whatsoever of the spirit and intent of NEPA. Our sole objective is to stimulate thoughtful consideration of the subject by those in better position to take such action as seems appropriate.

In regard to transmission lines, the Applicants, although acknowledging the constraints of legal precedent upon the Board, urge the Board nonetheless to rule that it is without authority to order the Applicants to adopt any specific routes for transmission lines and to further rule that the Board's authority is limited to a consideration of the environmental and economic costs of the lines proposed by the Applicants as part of the overall cost-benefit balance in connection with the facility as a whole (Applicants' Proposed Finding V.X).

We reject this Proposed Finding and base our ruling on the decision of the Atomic Safety and Licensing Appeal Board in Detroit Edison Company, (*Greenwood Energy Center, Units 2 and 3*), Dkt. Nos. 50-452, 50-453, ALAB-247, RAI-74-12, 936, December 20, 1974).

• • •
[3 NRC 937]

VI. ORDER

On the basis of the Board's findings and conclusions in this Initial Decision, and pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's Rules and Regulations, it is ORDERED:

That the Director of Nuclear Reactor Regulation is authorized to issue construction permits in appropriate form to the Applicants herein to construct Seabrook Station Units 1 and 2.

That such permits shall contain the following conditions for the protection of the environment:

- • •
- d. The Applicants shall alter the route of the Seabrook-Newington transmission line in the Packer Bog area so as to traverse the Bog, as shown on Applicants' Exhibit 18;
 - e. The Applicants shall alter the route of the Seabrook-Scobie transmission line in the Pow Wow-Cedar Swamp Natural Area so as to conform to the Staff's minimum circumference dogleg, which is formed by a straight extension northward of Applicants' B dogleg (PSCO's alternative B dogleg, Applicants' Ex. 15 and Figure 4.2 of the FES) until it intersects the Staff's FES dogleg (NRC proposed route, Applicants' Ex. 15), and on the west of Applicants' B dogleg, by extending that west segment straight on toward the north edge, until it intersects the Staff's FES dogleg;

• • •
[3 NRC 940-941]

[DR. SALO DISSENTING]

INTRODUCTION

My opinion is based on a result of a lack of complete agreement with the majority on each of the above issues and on an overall cumulative judgment based on the following:

- • •
- 5. The direct route of the transmission lines from Seabrook to the Scobie Pond substation with its high environmental impact should be avoided. Although the doglegs proposed by the Staff⁴⁹ and "Forests"⁵⁰ lessen

⁴⁹ The so-called minimum circumference dogleg.

⁵⁰ Forests proposes as a last alternative a dogleg of greater (maximum) circumference.

the environmental impact, it (the impact) can be further reduced by utilizing the "Northern Route."⁵¹ The claims of the Applicants that electrical stability is a major problem can, in my opinion, be discounted considerably; however, if the problem of stability cannot be resolved, then I would recommend the maximum circumference dogleg. The entire issue may be resolved by further consideration of alternate sites.

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⁵¹ The Seabrook-Newington corridors with the so-called Barton Hill jog.

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING APPEAL BOARD**

ALAN S. ROSENTHAL, Chairman
DR. JOHN H. BUCK
MICHAEL C. FARRAR

IN THE MATTER OF
PUBLIC SERVICE COMPANY
OF NEW HAMPSHIRE, ET AL.
(SEABROOK STATION, UNITS 1 AND 2)

DOCKET NOS. 50-443
50-444

MESSRS. ANTHONY Z. ROISMAN and DAVID S. FLEISCHAKER, Washington, D. C. (with whom Ms. KARIN P. SHELDON, Washington, D. C., was on the briefs), for the intervenor, New England Coalition on Nuclear Pollution.

MR. ROBERT A. BACKUS, Manchester, New Hampshire, for the intervenors, Seacoast Anti-Pollution League, the Audubon Society of New Hampshire, and the Society for the Protection of New Hampshire Forests.

MR. DONALD W. STEVER, JR., Assistant Attorney General of New Hampshire, Concord, New Hampshire, for David H. Souter, Attorney General of New Hampshire.

MS. ELLYN R. WEISS, Assistant Attorney General of Massachusetts, Boston, Massachusetts, for the Commonwealth of Massachusetts.

MR. NORMAN C. ROSS, Brookline, Massachusetts, filed a brief for the intervenor, Donald B. Ross.

MR. THOMAS G. DIGNAN, JR., Boston, Massachusetts, (with whom MR. JOHN A. RITSHER, MS. ELEANOR D. ACHESON, and MR. R. K. GAD, III were on the briefs), for the applicants, Public Service Company of New Hampshire, *et al.*

MESSRS. MICHAEL W. GRAINEY and RICHARD C. BROWNE (with whom MR. JAMES M. CUTCHIN, IV and MS. MARCIA E. MULKEY were on the briefs), for the Nuclear Regulatory Commission staff.

DECISION
JULY 26, 1977
(ALAB-422)

Opinion of the Board:

. . .

[6 NRC 82-90]

VI.

TRANSMISSION LINES

One of the environmental issues to which the Licensing Board devoted considerable attention involved the location of the transmission lines needed to serve the facility. Approximately three weeks of hearings were devoted to that issue. The Society for the Protection of New Hampshire Forests contended that resort to the routes proposed by the applicants would cause unreasonable environmental degradation, and suggested several alternate routes which it deemed preferable. In the initial decision, the Board considered many of these alternatives as well as others offered by the staff (or brought forth by the applicants at the staff's request). The conclusions it reached are challenged by the Forest Society and the applicants.

As developed in detail in the initial decision (3 NRC at 885-90), three different lines were proposed to connect the Seabrook site to the 345 KV New England transmission grid. The Seabrook-Scobie Pond line would run generally westward from the facility, terminating at the Scobie Pond substation; the Seabrook-Newington line generally north; and the Seabrook-Tewksbury line generally to the southwest across the Massachusetts border to the Tewksbury substation.

The principal focus below was on particular segments of the Seabrook-Scobie Pond and Seabrook-Newington lines. The first of these lines was to cross the Pow Wow River-Cedar Swamp environs but the Licensing Board modified

the proposed route to follow a "minimum circumference dogleg", which was a variant of a route suggested by the staff. The Seabrook-Newington line was to traverse an area known as Packer Bog and the Board found this route to be acceptable.

The applicants take exception to the Board's alteration of the route for the Seabrook-Scobie Pond line. In addition, they insist that the Board should not have directed them to use the route which they proposed for the Seabrook-Newington line. The Forest Society seeks a different route for both lines. We find that the Licensing Board properly balanced the various considerations bearing upon transmission-line routing and that the conclusions it reached should be upheld.

A. The applicants first argue that the Licensing Board was without legal authority to order any change in the transmission routes which they had selected. They recognize our previous holding that boards do indeed have such authority. *Detroit Edison Co.* (Greenwood Energy Center, Units 2 and 3), ALAB-247, 8 AEC 936 (1974). But they claim both that *Greenwood* should be overruled and that it does not govern this case.

The first of these claims has been now laid to rest by the Commission's recent decision in *Kansas Gas and Electric Co.* (Wolf Creek Nuclear Generating Station, Unit No. 1), CLI-77-1, 5 NRC 1 (January 12, 1977). There, the Commission affirmed our holding that the environmental effects of an offsite access road and a rail spur are within the NRC's regulatory jurisdiction. In doing so, it analogized the regulation of off-site access roads and railroads to that of off-site transmission lines and explicitly approved the reasoning which we earlier had enunciated in *Greenwood*. *Id.* at 7-8. And it emphasized that NRC authority to review such off-site impacts goes beyond merely factoring them into a final cost-benefit balance (as the applicants there had contended) and includes as well the authority "where neces-

sary [to] impose license conditions to minimize those impacts". *Id.* at 8. That ruling requires rejection of the similar argument tendered by the applicants here.

In *Greenwood*, we left open the question "[w]hether the Commission may impose license conditions compliance with which would violate regulations of other state and local agencies * * *". 8 AEC at 946, n. 20. The applicants' alternative theory is that here (unlike in *Greenwood*) the Licensing Board's transmission line conditions do run afoul of state regulation in the form of certain rulings of the New Hampshire Public Utilities Commission and the New Hampshire Bulk Power Supply Facility Site Evaluation Committee.

We have examined the determinations of those agencies upon which the applicants rely. In our view, they do not, as the applicants would have it, constitute a conclusive direction that the transmission lines follow certain routes and none other. To the contrary, the Site Evaluation Committee confined itself to findings that "the site and facility of the proposed nuclear project at Seabrook, New Hampshire and its associated transmission lines will not unduly interfere with the orderly development of the region [and] will not have an unreasonable adverse effect on esthetics, historic sites, air and water quality, the natural environment and the public health and safety". *Minutes of Meeting of Site Evaluation Committee*, July 27, 1973, at p. 3. Of greater significance, in authorizing the placement of the transmission lines along the routes proposed by the applicants to it, the Public Service Commission made it perfectly clear that the applicants were free later to seek approval of a different routing. *Certificate of Site and Facility*, Commission Report & Order No. 11,267, dated January 29, 1974, at pp. 9-10. In short, as matters now stand, it cannot be said that the applicants are confronted with an unalterable State demand that the transmission lines be placed in any particular location.

This being so, the question reserved in *Greenwood* is not here presented and this need not be reached. Our *Greenwood* holding, as approved by the Commission in *Wolf Creek*, is fully applicable and confirms that the Licensing Board has legal authority to take the action which it took. We turn now to the question whether the Board reached an appropriate conclusion in exercising that authority.

B. The Pow Wow River-Cedar Swamp area has been portrayed in such terms as "unique", "unusual", "outstanding", "unspoiled", "peaceful", a "recognized scenic area" and "of regional significance".⁵⁴ Our examination of the record, supplemented by the tour which we took in the company of representatives of both the Forest Society and the applicants, convinces us that the area is one worthy of protection.

As described by the Licensing Board, what is involved is a natural area of about 1000 acres, recognized as significant by several regional and local governmental agencies. Approximately 10-15% of it is under the protective ownership of the Forest Society. Through its center flows the Pow Wow River, surrounded on both sides by an extensive freshwater marshland complex. The area includes relatively dense or pure stands of Atlantic White Cedar trees, a major portion of which is located on the Forest Society property. Across the marsh one can obtain an unobstructed view up to the forest edge, with no man-made structures save "a few earth-colored duck blinds used by frequent duck hunters in season". No artificial structures are visible above the trees. 3 NRC at 888-89.

The FES noted (§ 3.8.5) that the area "is comprised of a mix of river marsh abundant with submergent and emergent vegetation; white cedar, located on drained deposits; and upland hardwoods on adjacent higher grounds, pre-

⁵⁴ Forest Exh. 1, pp. 2, 4; Forest Exh. 2, p. 3; FES, § 3.8.5, 4.1.2; 3 NRC at 888-89.

senting a diverse environment which heretofore has not been subjected to any substantial development". Some of the cedar trees are over 100 years old (Tr. 8187). Moreover, as the Board observed, the extensive river-marsh complex is "very uncommon in southeastern New Hampshire"; and the Atlantic White Cedar species, which is found only in the Atlantic Coastal regions of the United States, is "becoming increasingly scarce as its available habitat is reduced by economic development". 3 NRC at 888.

The area is used for recreational purposes by hunters, campers, canoeists and occasional youth groups (Tr. 8026, 8144-45, 8227-28, 8245-46, 8308, 8559, 8564-65, 9395, 9636-38). The Forest Society is developing nature trails and surveying and marking the trees on its property (Forests Exh. 4; Tr. 8230, 8243). It plans to use the area for educational purposes, scientific study, and "as an area of open space and passive recreation" (Tr. 8220). The Society conducts about 10 field trips per year for groups of up to approximately 30 persons (Tr. 9395). The Board noted, however, that

Except during the hunting season, it is a relatively uncrowded and peaceful area. As the population and economic development of this region increases, the recreational value of this relatively pristine area will increase.

3 NRC at 889.

We have described the Pow Wow River-Cedar Swamp area in some detail in order to place in context the issues concerning that area which we must resolve. The applicants wish to route the Seabrook-Scobie Pond line directly across one of the widest sections of the marsh, about midpoint along its north-south length, using two approximately 200-foot steel lattice-work towers (3 NRC at 889). The Board found that the towers and lines would be visible from most vantage points along the edge of the marsh as well as from the Pow Wow River (*ibid.*) and, in essence, agreed with the staff's conclusion that they would constitute "a major insult to a recognized scenic area" (*id.* at 890; FES, § 4.1.2). It

also found that the towers and lines across the marsh might have a significant adverse effect on migratory waterfowl. Further, it expressed reservations respecting the feasibility of the applicants' proposed construction methods designed to avoid the introduction into the swamp of either the tower structures themselves or the vehicles or equipment utilized in construction (see ER, § 4.2.1). If not feasible, according to the Board, the result might be a "require[ment for] the placement of transmission structures in the marsh itself . . . and/or the movement of heavy equipment into this natural area". 3 NRC at 890, citations omitted.

The Board therefore ordered the applicants to route the Seabrook-Scobie Pond line over an alternative route: a minimum-circumference dogleg skirting the edge of the natural area. Wooden H-frame towers, designed to blend with the forest, are to be used. They are to be approximately 75 feet high, not visible above the top of the adjacent trees. Potential construction impacts would be alleviated. And, significantly, "[t]he dogleg [route] would not present any wide open vistas to visitors to the Pow Wow River-Cedar Swamp Natural Area". *Id.* at 889.

The applicants advance several reasons why they should not be required to route their line on the dogleg. Foremost is the added cost — about \$493,000 if their estimate is accepted (*cf.* Tr. 8934 with Tr. 8938-39), substantially less if the staff's analyses (using applicants' own data) are accepted (Tr. 8883-91, 9145-46; *Staff's Proposed Modifications of Applicants' Proposed Findings of Fact and Conclusions of Law*, dated December 18, 1975, at pp. 26-28). Also mentioned are the considerations that some cedar trees might have to be cut on the dogleg; that a route for off-road vehicles would have to be established; that herbicides would have to be used; and that there would be a visual impact on as many as three homes — effects which assertedly would not occur if the route straight across the marsh were utilized. Finally, the dogleg is described as producing some

of the same effects — for example, a visual insult — as the proposed route, albeit to a somewhat lesser extent.

For its part, although regarding the minimum circumferential dogleg route as more acceptable than the one advocated by the applicants, the Forest Society would have us adopt an alternative route which would avoid the Pow Wow River-Cedar Swamp area altogether or, if not that, at least use a larger dogleg. Its preferred route, running to the north and west of the approved route and using existing transmission corridors for about 82% of its length, was endorsed by Dr. Salo, the dissenting member of the Licensing Board. It was opposed by the applicants because its additional length of 9 miles assertedly would cause electrical stability problems. Dr. Salo thought those problems could be “discounted considerably”; if they nevertheless proved unresolvable, the Forest Society’s larger dogleg would in his view be the best choice. 3 NRC at 940-41. Use of that dogleg would cost about \$1,000,000 more than the applicants’ proposal and some \$500,000 more than resort to the minimum circumference dogleg (Tr. 8933-39; Forests Exh. 2, Att. C).

In examining transmission line routing controversies, it must be borne in mind that no potential route is free of all impacts. Further, what to one person may be an acceptable impact may in the eyes of another amount to environmental degradation of enormous dimensions. As a consequence, infrequently if ever will there be universal agreement regarding what particular route is preferable. This consideration does not, however, affect this Commission’s responsibility to pass judgment on the various alternatives to the end that the environmental aftermath of licensing may be minimized “to the extent reasonably practicable”. *Greenwood*, ALAB-247, *supra*, 8 AEC at 944, and cases there cited. The discharge of this responsibility necessitates the making of as objective an appraisal as is possible of the nature and extent of the environmental implications of each alternative

route and a weighing of the results of that appraisal against the other factors (economic and technical) which also must be taken into account. Here, this process leads us to conclude that there is no reason to disturb the Licensing Board choice of the minimum circumference dogleg.

Central to our rejection of the applicants’ belief that the line should be allowed to cross the middle of the Pow Wow River-Cedar Swamp area is the special character of that area. It may well be that white cedar trees exist elsewhere, and that there are other marshes or swamps in New Hampshire. What makes this area “unique” is that it is the only one under protective ownership where pure stands of white cedar trees are combined with the “river marsh and the bog, the cedar swamp itself” (Tr. 8229, 9399, 9455-57). Beyond doubt, the presence of two 200 foot towers (Tr. 8505) and associated wires in the midst of the area would occasion a visual intrusion of considerable magnitude. Contrary to the belief of the applicants, by no means can that intrusion be equated to the visual impact that would attend upon the routing of the line on the minimum circumference dogleg — a routing which, once again, would not bring either the towers or the wires into the line of sight of most visitors to the area. True, at least one — and perhaps three — private homes would be brought within the shadow of the line. It would appear, however, that this relatively limited impact could be readily reduced (even though not eliminated entirely) by a screen of trees of some other form of vegetation (Tr. 10127).⁵⁵

The other ingredients of the applicants’ attack upon the Licensing Board’s result are no more persuasive. The cost differential — at most slightly less than \$500,000 — is not insignificant but, at the same time, is not to our mind suffi-

⁵⁵ Although we are not placing a specific condition on the construction permits in this regard, we will expect the applicants to take all feasible measures to implement our suggestion.

ciently great to overcome the desirability of protecting the sanctity of the area. There is no indication in the record that the number of cedar trees which might have to be cut is appreciable; beyond that, what would be lost is a scattering of cedars interspersed among much more abundant hardwood trees rather than the stands of pure cedar which provide the area with its unique character (Tr. 10104, 10141). All of the other environmental impacts of routing on the minimum circumference dogleg appear to us to be *de minimis*.

Moving on to the Forest Society's suggested alternate routes, the record does not establish that the larger dogleg would be sufficiently environmentally superior to the minimum circumference dogleg to justify the additional \$500,000 cost. The principal comparative advantage assigned to the former was that it would result in a greater "buffer zone" between the natural area and outside development (Tr. 9411-12, 9457-58, 10151-52). But we find nothing in the record to suggest that, if located on the minimum circumference dogleg, the line would not itself provide a buffer adequate to protect against possible harmful encroachment upon the Cedar Swamp ecosystem.

The "northern route" preferred by the Forest Society does offer at least one environmental advantage in that, although several miles longer than any of the other proposed routes, it utilizes existing transmission corridors for over 80% of its length (Forests Exh. 3, p. A2). We are confronted, however, with the applicants' insistence that the employment of the northern route would occasion a stability problem — i.e., an inability in the event of an electrical fault to maintain synchronization between the various generating stations supplying power to the grid to which the particular transmission line is connected (FES, p. A-19). The uncontroverted evidence is to that effect (Tr. 8479, 8481, 8924-25 as corrected on 8957, 9098-9101). What is less clear is whether, and at precisely what additional cost, this prob-

lem might be overcome. It appears from the record, however, that in all events the northern route would be considerably more expensive.

Leaving aside the cost which would be involved in rectifying the stability problem, the appreciably greater length of the route would necessitate a much larger number of towers. On the average, there would be 10.5 towers per mile (Tr. 9297). Wooden H-frame towers cost \$6,700 each (Tr. 8805); every time the line makes as little as a 2 degree change in direction, the applicants' practice is to use a steel tower which costs \$45,000 (Tr. 8644-48, 8805). Moreover, there would be some expense for the additional wire. In this connection the cost to the applicants of constructing a line between Newington and Deerfield, exclusive of right-of-way expense, ran to \$150,000 per mile (Tr. 8806). Here, the fact that the northern route would parallel an existing line for much of its length does not mean that little right-of-way acquisition would be necessary. To the contrary, between 85 and 125 feet of additional right-of-way width would have to be obtained for the portion of the northern route which paralleled an existing line (Tr. 8633, 9256). Otherwise, approximately 170 feet would be needed (Tr. 8600).

Still further, even though we do not know the precise cost of overcoming the stability problem (assuming that it is possible to do so), the evidence indicates that one step that would have to be taken would be additional insulation and H-frame bracing along the entire 38 miles of the northern route. This would add \$10,000 per mile to the cost of constructing the line (Tr. 9318-20).

What the matter thus comes down to is whether the environmental benefits attendant upon resort to the northern route would outweigh the increased cost and the possibly irremediable stability problem which such resort would entail. We conclude not. For one thing, as just seen, even where the northern route paralleled existing lines additional land would have to be taken to broaden the corridor. Sec-

ondly, use of the minimum circumference dogleg will provide a sufficient measure of protection to the sanctity of the Pow Wow River-Cedar Swamp area that it would not appear warranted in the interests of still further protection to incur both markedly greater expense and the risk of significant technical difficulties.

C. Packer Bog, through which the Seabrook-Newington line (as approved by the Licensing Board) is to pass, is located in large part in the Town of Greenland and to a lesser extent in the Town of Portsmouth, New Hampshire (Tr. 8043, 8046). In many respects it is similar to Cedar Swamp: *viz.*, a swamp area in which are interspersed some white cedar trees. The cedar trees are found in two concentrations, which taper off into the swamp in which are found mostly deciduous trees (Tr. 8046-47). One of these concentrations is a rather large pure stand of cedar (Tr. 10145).

The Chairman of the Portsmouth Conservation Commission testified under the sponsorship of the Forest Society. She stressed the "scientific interest [in] and educational value" of preserving the swamp area with its white cedar trees within the town limits of Portsmouth and noted that the Conservation Commission had acquired certain land areas (which included a small area of 2.1 acres in Packer Bog) to foster "the preservation of open space in its natural condition" (Forests Exh. 8, p. 3; attachment 1).

The applicants, following discussions with local groups (including the Portsmouth Conservation Commission), originally sought to avoid Packer Bog by skirting the southeasterly edge of that area, and it received permission from the New Hampshire Site Evaluation Committee to do so. But such a route would have traversed the land on which the major pure stand of white cedar lies, possibly requiring the removal of some of those trees (Tr. 8046-47, 8135). To obviate this possibility, the applicants asked the Licensing Board to approve an alternate route through the center of

the Bog which would avoid the cedar trees and also result in construction on a higher and drier strip of land than that encompassed by the original proposal (Tr. 9044-49, 9128-29). The Licensing Board approved this alternate route. 3 NRC at 890.

On appeal, the Forest Society complains of this result. It urges that the Board should have chosen instead the route suggested by the Conservation Commission. That route jogs somewhat to the north and west of the approved route and would parallel existing transmission lines for a substantial portion of its length. It would avoid the Bog and the cedar trees altogether.

There apparently is no problem electrically or mechanically with this route (Tr. 8128-30), and the applicants conceded that it might cost less (albeit not by much) than either of the alternatives they were prepared to support (Tr. 9168-76). But use of it would require either (1) higher towers and wires which would be highly visible in the Town of Greenland through which the line would run (Tr. 8917, 9053); or (2) the acquisition of a wider right of way and a placement of the towers and wires which would have a significant visual impact upon residential properties in Greenland (Tr. 8918-19). The Licensing Board's rejection of the route was apparently grounded on these considerations. 3 NRC at 890.⁵⁵

As in the case of the Pow Wow River-Cedar Swamp area, we must balance the benefits and detriments of the various alternatives. Despite some similarities between the two areas, Packer Bog lacks the unique features of Cedar Swamp. Its cedar trees are less in number and in any event are not likely to be disturbed by the route approved by the Licensing Board. It has no river marsh. And it has

⁵⁵ The Board failed to explain why it reached its conclusion, but it did recite a portion of a finding proposed by the applicants concerning the visibility of the line in Greenland.

no visual vistas comparable to those which the Pow Wow River-Cedar Swamp area offers, since it is already bounded on two sides by a road and a railroad track respectively.

Further, as our tour of the area confirmed, the interior of Packer Bog is relatively inaccessible to the general public, lacking any developed trails or paths. Indeed, one of the reasons its preservation is sought is to avoid the effects of human intrusion:

The creation of an access to human traffic into the heart of the swamp forest could, furthermore, have disrupting effects on the fragile plant community as well as on the deer population * * * .

Forests Exh. 8, p. 4.

Beyond these factors, the environmental costs of the Conservation Society's route are of some consequence. In particular, the visual impact on residences would be significant—not just on one house (or at the most three houses) as with the minimum circumference dogleg around Cedar Swamp, but rather on a number of old colonial houses (Tr. 8919, 9053). Local officials in the Town of Greenland indicated to the applicants that they objected to such a route (Tr. 8916-19), although the Chairman of the Portsmouth Conservation Commission testified that Greenland's Head Selectman had told her he knew of no such objection (Tr. 9608).

All things considered, the choice between the approved and the Conservation Society routes appears to be very close. In our judgment, however, the environmental effect upon the Packer Bog of use of the former is outweighed by the effect which the latter would have upon Greenland residents. This being so, we would not be justified in disturbing the Licensing Board's result.

* * *

[6 NRC 114]

[MR. FARRAR — DISSENTING]

* * *

3. *Transmission Lines.* I believe the record could have been far more thoroughly developed with respect to the comparative economic costs of the so-called "Northern" route and the route which the Licensing Board decreed be followed. There is room for a clearer appreciation, for example, of both (1) the expense involved in overcoming the asserted electrical stability problem, and (2) the relative costs of land requisition in the two corridors (given that the longer route could use a narrower right of way and that land values might differ in the two areas). Although on the present record the question is an extremely close one, I cannot say that the additional measure of environmental protection that the Northern route would afford to the Cedar Swamp area (i.e., avoiding it entirely rather than merely skirting it, as the dogleg would do) is worth the additional economic cost apparently associated with that route.

* * *

THE STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

Docket No. D-SF6205

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

SEABROOK NUCLEAR POWER PLANT

CERTIFICATE OF SITE AND FACILITY

COMMISSION REPORT

AND

ORDER NO. 11,267

January 29, 1974

D-SF6205

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Application for Certificate of Site and Facility for nuclear electric generating station at Seabrook, New Hampshire (alternate, Litchfield, New Hampshire) and associated transmission lines;

Application for authority to do business as an electric public utility in the Towns of Seabrook, Danville, Hampton, Hampton Falls, South Hampton, Exeter, Stratham, Kensington, East Kingston and Kingston; and

Applications for licenses to construct and maintain electric transmission lines over and across public waters and to construct and maintain conduits (tunnels) under and across public waters and lands.

• • •

Appearances (general): For the Petitioner, Franklin Hollis and Joseph S. Ransmeier; for the Public, Donald W. Stever, Jr., Assistant Attorney General; for the Seacoast Anti-Pollution League, John Mahar and Karen Sheldon; for the Society for the Protection of New Hampshire Forests, Paul O. Bofinger and Robert A. Backus; for the United States Environmental Protection Agency, Charles Corkin, II; for the Conservation Commission, Peter E. Randall; for the Audubon Society of New Hampshire, Tudor Richards; for the North Hampton Conservation Commission, Rudi Smith; Elizabeth Weinhold, pro se and Willard M. Brownell, pro se.

• • •

REPORT

These proceedings were initiated on February 1, 1972 when Public Service Company of New Hampshire ("the

Company"), pursuant to RSA 162-F (Chapter 357 of the Laws of 1971) filed an application for a certificate of site and facility for the construction of a nuclear electric generating station at Seabrook, New Hampshire, and associated transmission lines, with the Public Utilities Commission ("the Commission"). Under the provisions of RSA 162-F:7 I, the Commission is required to hold a joint public hearing with the Site Evaluation Committee ("the Committee") and such other State agencies as have jurisdiction over related matters, i.e. discharge into public waters, air pollution, and dredge and fill of public waters, within six (6) months of the date of application upon not less than twenty-one (21) days public notice.

On April 3, 1972, an order of notice of public hearing, to be held on June 19, 1972 at the Winnacunnet High School in Hampton, New Hampshire at 10:00 a.m. was issued, with instructions for the Company to give public notice through newspapers having general circulation in the territory involved, notice to pertinent local officials and planning commissions by individual delivery, and to file a copy of the application in the State Library at Concord and in four (4) other public libraries at Portsmouth, Seabrook, Manchester and Nashua. A certificate of compliance with the order has been filed by the Company.

Joining the Commission and the Committee at the opening hearing, some as members of the Committee, were representatives of the following agencies, who, under the provisions of various statutes, have the responsibility for issuing permits or licenses:

1. Special Board;
2. New Hampshire Water Supply and Pollution Control Commission;
3. New Hampshire Department of Public Works and Highways; and
4. Air Pollution Control Commission.

Thirty-two (32) days of hearings were held during the period from June 19, 1972 to May 25, 1973. A view of the plant site area was made on June 29, 1973. Over five thousand eight hundred (5,800) pages of testimony were taken involving some one hundred twenty (120) witnesses and statements by individuals. Approximately two hundred (200) exhibits were also introduced at the hearings.

The Company seeks authority to construct a nuclear generating station consisting of two (2) 1100-Megawatt units at a site in Seabrook easterly of the Boston and Maine Railroad and southerly of Brown's River on a spot known as "The Rocks", as shown on the Company's Exhibit No. 39 (Appendix 1). Cooling water for the plant's condensing unit will be taken from, and discharged into, the Atlantic Ocean by means of two (2) bedrock tunnels eighteen (18) feet in diameter approximately one hundred fifty (150) feet under the beach area, and extending approximately one mile off shore. The general route of the tunnels is set forth in Company Exhibit No. 106, Page 12, Figure 3-1 (Appendix 2). A later exhibit filed by the Company in connection with its application for a license to cross under public land and waters is attached as appendix 2A. There is no significant change in the general location of the tunnels, merely a reversal in the location of the intake and discharge tunnels). Transmission lines which are associated with the project are rated at three hundred forty-five (345) Kilovolts. Three (3) lines are involved — Line No. 1, seven (7) miles long, running from the Seabrook plant to the Massachusetts line; Line No. 2, twenty (20) miles long, running from the Seabrook plant to the Newington plant and Line No. 3, twenty-nine (29) miles long, running from the Seabrook plant to a system sub-station (Scobie) in Londonderry. The routes of these lines are set forth in Company Exhibit 53A (Appendix 3). The construction features of the lines are set forth on Exhibits 57 (Appendix 4) and 58 (Appendix 5).

Under the provisions of RSA 162-F:8 the Commission in order to issue a certificate of site and facility must find that the construction of the facility —

- (a) Will not unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal legislative bodies;
- (b) Is required to meet the present and future demand for electric power;
- (c) Will not adversely affect system stability and reliability and economic factors; and
- (d) Will not have an unreasonable adverse effect on esthetics, historic sites, air and water quality, the natural environment and the public health and safety.

Prior to any action by the Commission, the Committee, after having considered available alternatives and the environmental impact of the site or route, must find that the site and facility [will not unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal legislative bodies], and [will not have an unreasonable adverse effect on esthetics, historic sites, air and water quality, the natural environment, and the public health and safety], and shall send its findings to the Commission within eighteen (18) months of the filing of an application for a certificate of site and facility.

On July 27, 1973 the Committee, by an eight (8) to four (4) vote, found as follows:

- (1) That it has given due consideration to the views of municipal and regional planning commissions and municipal legislative bodies concerned with the site and facility of the proposed nuclear project at Seabrook, New Hampshire and its associated transmission lines and that the site and facility of the proposed nuclear project at Seabrook, New Hampshire and its associated transmission lines will not unduly interfere with the orderly development of the region; and

- (2) That the site and facility of the proposed nuclear project at Seabrook, New Hampshire and its associated transmission lines will not have an unreasonable adverse affect on esthetics, historic sites, air and water quality, the natural environment and the public health and safety.

The Committee's full report is attached as Appendix 6. It will be noted that the findings under No. 1 and No. 2 above coincide with (a) and (d) as listed in RSA 162-F:8 I.

The Commission, being bound by these findings, now must make definitive findings on (b) and (c), namely, that the construction of the facility —

- (b) is required to meet the present and future demand for electric power; and
- (c) will not adversely affect system stability and reliability and economic factors.

We first turn our attention to (b). The evidence presented by the Company, official reports to this Commission, statements by both governmental and industrial organizations, and actual operating experience, give overwhelming testimony to the need for added generating capacity to meet the present and future demand for electric energy. Historically, the Company's peak load has grown from two hundred fifty-five (255) megawatts in 1955 to eight hundred six (806) megawatts in 1971. The Company projected eight hundred eighty-seven (887) megawatts for 1972 and the actual figure on December 15, 1972 was eight hundred seventy-five (875) megawatts. More importantly, though, a peak of nine hundred thirty (930) megawatts was reached twenty-four (24) days later, on January 8, 1973. Thus, forecasting done on a calendar year basis must be considered in the light on the winter peak, which often occurs in January. The Company's projection for the years 1979 and 1981, the years during which Seabrook 1 and 2 are scheduled to come on line, is one thousand seven hundred forty-two (1,742) megawatts and two thousand one hundred twelve (2,112) megawatts, respectively.

In order to test the Company's projections, an outside agency was engaged, under the provisions of RSA 162-F:7 V, to make independent load projections. The New England Energy Policy Staff (NEEPS) agreed to do this work and its Executive Director, Paul H. Shore, presented testimony on this subject through a thirteen (13) page exhibit (Site Evaluation Committee, Exhibit No. 1). NEEPS was an agency of the New England Regional Commission, operating organizationally as a part of the staff of the New England Governor's Conference. It was established to serve the general public in developing and keeping current a broad overview of New England's energy problems with particular emphasis on the electric power portion of the total energy spectrum. NEEPS worked closely with each state public utility commission and other public and private groups and agencies in analyzing regional energy needs and resource potentials and in developing a long-range regional energy policy framework within which local, state and regional decisions may be made.

Exhibit 6 showing the Company's bulk power supply projections is set forth below, to which has been added the NEEPS projection, by years until 1980 and then every five (5) years to the year 2000. It should be noted that the Company's projection involved its own load based on historical facts projected forward, whereas the NEEPS approach was to project the New Hampshire load based on its relationship to the New England load.

The Company is responsible for serving the bulk of New Hampshire through its retail sales and sales to other public utilities, which includes service to some borderline towns in Maine and Vermont, while the New Hampshire load excludes these but includes a few New Hampshire towns whose source of power is from sources other than Public Service Company of New Hampshire. Thus the two loads are theoretically not the same, but are close enough for all practicable purposes to reflect usage trends.

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
SEABROOK PROJECT
PROJECTIONS FOR BULK POWER SUPPLY, 1972-1984**

The Company projects a 1.78 times increase in load from 1973 to 1979, the year the first Seabrook unit is scheduled. NEEPS forecasts a 1.62 increase in the New Hampshire load. Applying the lower increase to the Company's projection would produce a reduction of one hundred fifty-nine (159) megawatts in the Company's forecast for 1979, an amount equal to about one year's growth at that time. In such a projection involving a substantial planning and construction period of several years, an underforecast would have serious consequences; whereas an overforecast in a continually increasing situation merely requires a little slippage, if, in fact, usual delays fail to materialize. In a Federal Power Commission report of "Delays of Scheduled Operation of Electric Generating Units" dated March 7, 1973, twenty-nine (29) nuclear units totaling twenty-four thousand two hundred eighty-three (24,283) megawatts were shown as being delayed from one to three years. Thus, we must conclude that the need for generating capacity exists, that the Company's forecast is supported by an independent and neutral agency, and that a forecast on the high side contains a desirable cushion.

Witnesses produced by public counsel and intervenors attacked the Company's projection method on the grounds that it failed to take into consideration numerous conditions that would affect power use. Testimony by these witnesses unaccompanied by any positive projections of their own, can be given little consideration over some forty-five (45) years of actual performance by the Company in successfully projecting and matching generation capabilities to actual needs in such a manner that over fifty-one (51) billion kilowatt-hours have been delivered, with major service interruptions due only to floods and hurricanes, during almost a half-million hours of service.

Some of the opposition witnesses and those making statements suggested that demands for power could be met by Commission efforts to curtail power use through the estab-

lishment of rate schedules so structured as to penalize greater use. We reject this approach as irresponsible and invalid — irresponsible because it ignores the basic statutory authority of the Commission and invalid because our statutory authority clearly prohibits such action. RSA 341:1 and 2 read as follows:

341:1 *Service.* Every public utility shall furnish such service and facilities as shall be reasonably safe and adequate and in all other respects just and reasonable.

341:2 *Charges.* All charges made or demanded by any public utility for any service rendered by it or to be rendered in connection therewith, shall be just and reasonable and not more than is allowed by law or by order of the public utilities commission. Every charge that is unjust or unreasonable, or in excess of that allowed by law or by order of the commission, is prohibited.

As long as the capability exists to provide a utility commodity, it is our judgment that our duty requires us to see that the service rendered will meet the customers' demands, and will be just and reasonably priced. Within reasonable limits, just and reasonable charges must reflect the cost of the service provided. Arbitrary rate structures which are not based on the cost of service provided will not result in just and reasonable charges. The authority does not rest with this Commission at this time to control the use of utility resources by means of arbitrary rate structures.

During the hearing, questions were raised as to the need of such a large plant because some of the power was to be sent out of the State. Today, the bulk of all power generated and used in New England moves over an integrated electrical system involving the major operating utilities. A formal power pool has been established, known as NEPOOL. Larger power plants are built on a collective basis than could be built on an individual basis, so as to obtain economies of scale. Power is dispatched from a central control point so as to use the most efficient plants to

meet the variable conditions of load. Reference to Petitioner's Exhibit 6, reproduced above, shows that in 1979, while the Company will be releasing five hundred eighty-five (585) megawatts of Seabrook's 1100-megawatt capacity to out-of-state use, the Company will be purchasing five hundred thirty-seven (537) megawatts from an out-of-state plant(s) constructed under the same philosophy as Seabrook. Even after the installation of the second 1100-megawatt unit, the Company will be buying in 1983 an amount equal to that to be dispensed out of state at Seabrook.

We find that the construction of the proposed facility (b) is required to meet the present and future demand for electric power.

We turn now to the second finding we must make, namely, "that the construction of the plant will not adversely affect system stability and reliability and economic factors".

Uncontested testimony was introduced by the applicant's witness, Barbour, that the Seabrook plant would not adversely affect the system stability and reliability. The plant is designed in accordance with reliability criteria developed by the Northeast Power Co-ordinating Council, an organization made up of all major power companies in New England, New York, Ontario and New Brunswick. Stability studies have been conducted to determine the transmission lines necessary to connect this plant into the existing system. These lines are scheduled for construction as a part of the total facility now under consideration. A review of the basic costs involving Seabrook, and comparison with present-day costs of fossil plants, indicates that Seabrook will have no adverse affect on the economy. Uncontradicted evidence produced by the applicant showed such a significantly lower cost from a nuclear plant than from a similarly-sized fossil fuel plant as to eliminate even considering a fossil fuel plant unless the nuclear plant was beyond any possibility of becoming a reality. The cost advantages of nuclear energy

are set forth in the applicant's Exhibit 25, attached as Appendix No. 7.

Factual information as of September, 1973 indicated that an oil price of 0.90 cents per kilowatt-hour was already a reality for the Newington plant, scheduled to become operational in 1974. Thus, the rapid acceleration of fossil fuel prices has already exceeded that predicted earlier for 1979. This increase will serve to increase the favorable price advantage of nuclear energy.

On the basis of the foregoing we find that the construction of the Seabrook facility (c) will not adversely affect system stability and reliability and economic factors. Thus, all findings required under 162-F:8 (a), (b), (c) and (d) have been fulfilled, and shall be so considered in our action on the certificate of site and facility.

While the associated transmission lines will be authorized along the routes set forth in Exhibit 53A, we fully realize the possibility of refinement of these locations as field work progresses with the actual layout of these routes. This approval may be modified, upon request, by the Petitioner should meaningful negotiation with responsible local authorities, regional commissions, etc. result in any beneficial route relocations.

Authority to Operate as a Public Utility in Certain Areas

Pursuant to RSA 374:22, the Company seeks authority to do business as an electric public utility in the Towns of Seabrook, Hampton, Hampton Falls, South Hampton, Danville, Kensington, East Kingston and Kingston for the purpose of generating and transmitting electricity. We find that the operation proposed in these towns is necessary in the public interest and the authority is granted.

Authority for Overhead Wire Crossing of Public Waters

Under the provisions of RSA 371:17-20, as amended by Chapter 21, Laws of 1967, the Company seeks authority to

construct and maintain overhead river crossings of the 345 KV transmission lines along the routes authorized by the Site Evaluation Committee (Exhibit 53A, Appendix 3). An amended petition filed by the Company on September 21, 1973 setting forth the public water crossings along the routes, as finally approved, identified the crossings as follows:

1. The Massachusetts line will cross the Pow Wow River at a location approximately three hundred fifty (350) feet upstream from the New Hampshire-Massachusetts state line, as shown in red on a print of a portion of a U.S.G.S. map entitled "Proposed 345 KV Water Crossing Pow Wow River, South Hampton, N. H., January, 1972" attached hereto;
2. The Scobie line will cross the Pow Wow River and adjoining swamp in the Town of Kingston as shown in red on a print of a portion of a U.S.G.S. map entitled "Proposed 345 KV Water Crossing Cedar Swamp Area, Kingston, N. H., September, 1973", attached hereto;
3. The Newington line will cross Brown's River and adjoining marsh flooded at least at high tide in the Town of Seabrook, and Hampton Falls River, Taylor River and adjoining marsh flooded at least at high tide in the Towns of Hampton Falls and Hampton, all as shown in red on a print of a portion of a U.S.G.S. map entitled "Proposed 345 KV Water Crossings Hampton Tidal Area, Hampton-Hampton Falls, N. H., September, 1973", attached hereto.

Specific information as to tower locations, wire configuration and clearance is not available at this time, but licenses may be conditionally granted subject to the furnishing of this information as soon as it is available.

Following due notice, no interested parties offered objection, and, upon investigation and consideration, this Commission finds that the proposed construction is necessary in order to meet the reasonable requirements of service to the public, and that the licenses sought may be exercised without substantially affecting the public rights in the

waters crossed. These licenses are granted subject to the furnishing of plan and profile drawings showing tower and wire locations, construction design, and minimum vertical water clearance satisfactory to the Commission.

Authority to Construct Facilities Over, Under and/or Across State Land

A modified petition was filed by Public Service Company of New Hampshire pursuant to RSA 371:17 for authority to construct and maintain two tunnels serving the circulating cooling water system of its proposed Seabrook nuclear generating station (a) under Brown's River and tributaries thereto, Hampton River and/or Hampton Harbor and under the ocean floor of the Atlantic Ocean, all being public waters of the State of New Hampshire, to points of intake and discharge near the ocean floor at respective distances offshore of more than 3,000 and more than 6,000 feet, and (b) beneath U. S. Highway No. 1A and the State Park in the Town of Hampton, each constituting land owned by the State of New Hampshire; and to install at the ocean ends of said tunnels appropriate intake and discharge facilities. These tunnels are in lieu of the pipes for which the original petition was filed as a part of the Seabrook application.

The Company's application is thus incident to its pending petition for a certificate of site and facility for construction of the said Seabrook generating station.

At the hearing on the amended petition held on January 16, 1974, Mr. George Hamilton of the Department of Resources and Economic Development presented a letter to the Commission from Commissioner George Gilman of that Department requesting that the proceeding be deferred pending a determination by the Attorney General of the question of whether the Public Utilities Commission had jurisdiction to consider the Company's petition under RSA 371:17 or whether the Company should rather seek authority for the placing and maintenance of the said tunnels in,

through and beneath state lands and public waters from the Governor and Council. The Commission noted that the Company's original application for a certificate of site and facility for the Seabrook Station had been filed on February 1, 1972 and that under the provisions of RSA 162-F, as applicable to such application, a determination upon it was mandated not later than two years from such filing date. The Commission therefore declined Commissioner Gilman's suggestion to delay proceeding on the Company's tunnel application but ruled that it did so without prejudice to Commissioner Gilman's position and such further proceedings before the Governor and Council as might be appropriate in the event that the Attorney General might subsequently rule against the Commission's jurisdiction on the Company's present tunnel application.

At the hearing, the Company moved that the record of the proceedings before the Site Evaluation Committee in this docket be incorporated by reference, so far as material to the Company's present application. This Motion was granted, the Commission taking note of the provision of RSA 162-F:7 that hearings before the Site Evaluation Committee be joint hearings and satisfy the initial requirements for public hearings under statutes requiring permits relative to environmental impact. The Company then presented evidence as to its plans for the design and manner of construction of the subject tunnels. They contemplated sinking vertical shafts to a depth of two hundred feet or more on site at the generating station location which is owned exclusively by the Company. From these vertical shafts, two horizontal tunnels, each eighteen feet in diameter, one for intake water and one for discharge, will be driven through bed rock generally easterly toward Hampton Harbor. The Company either owns or will acquire either a fee simple title or perpetual easement rights to construct and maintain the tunnels through all privately owned land between the vertical shafts, on site, and Hamp-

ton Harbor. From a point directly beneath the westerly shore line of Hampton Harbor, the tunnels will continue easterly, pass beneath New Hampshire State Highway 1A and one or both of them beneath Hampton State Park. The intake tunnel will then continue 3,000 to 4,000 feet easterly beneath the ocean floor where it will terminate at a vertical shaft which will rise to the ocean floor and over which the Company will install an appropriate intake structure. This will be in a depth of 35-40 feet of water. The discharge tunnel will continue easterly from the shore line on the southerly side of the intake tunnel but will extend about 6,000 feet out from shore where it also will terminate at a vertical shaft which will rise to the ocean floor in a depth of 50 to 60 feet of water. At this point it will connect with a pipe line or lines which will extend an additional distance off shore and from which heated water from the plant will be discharged to the ocean through a series of diffuser ports (see appendix 2A). The Company's project manager, Mr. Beckley, testified that the installation, maintenance and operation of the tunnels will have no perceptible effect upon the use and enjoyment of the surface of the land and water beneath which they will pass, with the exception only that it is possible that during the course of construction it will be necessary to sink a shaft from some point in the State Park to one or both tunnels as a convenient means of access to the work location for materials and for ventilation. At the completion of the work, any such shaft would in any event be sealed off and the ground surface restored to its original condition. Whether or not such a shaft will be required has not yet finally been determined.

Mr. Hollis, appearing for the Company, represented to the Commission that Commissioner Gilman had indicated to him, as counsel for the Company, his willingness to accept an essentially nominal award of damages, on the assumption that one or both tunnels simply pass beneath

the State Park (without consideration of the effect of a possible vertical shaft from the ground surface to the tunnels during the construction period) and on the assumption the Public Utilities Commission is determined to have jurisdiction in the matter. Mr. Hollis represented to the Commission that Commissioner Whitaker of the Department of Public Works and Highways had expressed to him a similar position but subject to a request for an appropriate indemnity undertaking by the Company with respect to any loss or damage which the installation or maintenance of the tunnels might occasion. After the conclusion of the hearing, the Commission received from Commissioner Whitaker a letter dated January 22, 1974 confirming this position.

Upon consideration of the foregoing, the Commission finds, orders and adjudges as follows:

1. That a license for the construction, maintenance and operation of two tunnels incident to the construction and operation of the proposed Seabrook nuclear generating station of the Company, beneath the public waters of Brown's River, Hampton River and/or Hampton Harbor and the Atlantic Ocean, and through the land beneath New Hampshire State Highway 1A and Hampton State Park, with associated shafts at offshore intake and discharge facilities on the ocean floor, and a possible vertical shaft during construction opening at a point in Hampton State Park, all substantially as described hereinabove, may be exercised without substantially affecting the public rights in said waters and lands;
2. That it is necessary, in order for the Company to meet the reasonable requirements of service to the public, and therefore for the public good, that such license be issued to it pursuant to RSA 371:20;
3. That there be awarded to the State of New Hampshire compensation for damages on account of the rights to be granted the Company pursuant to the said license as follows:
 - a. With respect to the privilege of building and maintaining the said tunnels through the land

beneath New Hampshire State Highway 1A, the amount of \$100,

- b. With respect to the privilege of building and maintaining the said tunnels through the land beneath Hampton State Park, the sum of \$100,
- c. With respect to the privilege to cross beneath public waters and to construct and maintain intake and discharge facilities therein, \$1.

And said awards shall be paid by the Company prior to its exercise of the license;

4. That as a condition of the said license, the Company undertake to indemnify and save harmless the State of New Hampshire, the Commissioner of Public Works and Highways and the Commissioner of the Department of Resources and Economic Development, and each of them, from any and all liabilities, claims and demands of every sort and by whomsoever asserted against them, or any of them, as a result of any loss, damage, or expense occasioned to any person, enterprise, agency, or institution, as well as from any and all loss and expense occasioned to The State of New Hampshire, as a result of the construction, existence, maintenance or operation of the licensed facilities, including, without limitation, any and all harm of any sort to any public utility properties or facilities located along the said highway or within the said Park as well as any consequential harm to other properties resulting from damage imposed in the first instance upon such public utility properties; and the Company's said indemnity undertaking shall be placed upon file with this Commission prior to the Company's exercise of the license to be issued pursuant hereto;
5. No sufficient evidence was presented at the hearing to determine an appropriate compensation award to the State for its damages in the event that the Company finds it necessary to install a vertical shaft for use during construction and opening in the ground surface at a point within the State Park.
 - a. In the event that the Company determines that construction of the tunnels requires the sinking of such a shaft, it shall be a condition of the Company's license to do so that the area around the opening be fenced off from public access and

maintained in a safe condition during construction, and that at the conclusion of construction, the said shaft be permanently closed and sealed and the ground surface restored substantially to its prior condition;

- b. This Commission shall retain continuing jurisdiction of the damage issued with respect to such a possible shaft, and in the event that the Company finds it necessary to install the same, it shall advise the Commission in advance of the event and further hearing will thereupon be held with respect to such supplemental award of damages as may be appropriate with respect to the matter;
6. The Commission takes note of the fact that RSA 371:21 provides that it shall determine the compensation, if any, to be paid to the owners of lands bordering on public waters for their damages occasioned by the installation of licensed structures crossing such waters. In view of the Company's representation with respect to the land between the shore of Hampton Harbor and its Seabrook generating station beneath which the tunnels will pass that it will either own such lands in fee or will acquire and own easement rights to construct and perpetually maintain the tunnels through them, the Commission finds that there is no occasion at this time to award damages to any owners of lands adjoining public waters incident to the license to the Company to be granted pursuant to Finding and Ruling (2) above.

Permits or Licenses from other State Agencies

A. Air Pollution Control Commission

The Air Pollution Control Commission has furnished the Commission the following statement:

"The Air Pollution Control Agency under authority of RSA 125:92, 93 and 94 hereby issues to the New Hampshire Public Service Company Class B permits to operate two auxiliary boilers known as Seabrook Station Auxiliary boiler #1 and #2 for the purpose of developing process steam and for space heating when the nuclear units are not in operation.

A Class B (process) permit is also issued to allow the discharge of radioactive materials into the ambient atmosphere but said discharges shall not exceed the limit specified in Col. 1, Table II, Appendix A, Part A, New Hampshire Rules and Regulations for the Control of Ionizing Radiation. The company shall make every effort to keep the discharges of radioactive material to less than one-tenth (1/10th) of the specified limits.

No permits are required for the operation of the four diesel generators also to be located in this location. However, they would be expected to conform to Regulation No. 9 adopted under the authority of Chapter 125:80. All permits issued are Conditional Permits to Operate. Operating Permits are issued after the system is in operation."

The above permits and letter of transmittal from the Air Pollution Control Commission to the Company are attached as Appendix 8.

B. New Hampshire Department of Public Works and Highways

The New Hampshire Department of Public Works and Highways has granted approval for highway crossings by the 345 KV transmission lines by letter of December 21, 1973 addressed to the Commission with enclosures, which is attached to this report as Appendix 9.

C. Special Board

Approval by the Special Board for activities under its jurisdiction are attached as appendices to this report, as follows:

Appendix 10 — Dredge and Fill in the course of construction of the transmission lines

Appendix 11 — Dredge and Fill — Doktor's Pond

Appendix 12 — Dredge, Fill and Wharf — Brown's River

D. *New Hampshire Water Supply and Pollution Control Commission*

A permit issued to the Company by the Water Supply and Pollution Control Commission is attached to this report as appendix 13.

Finally, it is noted here that the United States Atomic Energy Commission, under the provisions of Federal Law, is required to issue a construction permit and operating license for such a nuclear plant as is proposed by the Company at Seabrook. Even though the plant cannot become a reality without AEC approval, we will nevertheless condition our certificate of site and facility upon obtainment of the Federal approval. The Company's application to AEC has been accepted and formally docketed by that agency, as evidenced by an acknowledgment letter dated July 5, 1973.

Upon consideration of all the facts, the Commission is of the opinion that granting the authorizations sought will be consistent with the public good. Our order will issue accordingly.

FRANCIS J. RIORDAN
Commissioner

ALEXANDER J. KALINSKI,
Chairman
SHIRLEY K. MERRILL,
Commissioner

Concurring
January 29, 1974

ORDER NO. 11,267

Upon consideration of the foregoing report, which is made a part hereof; it is

ORDERED, that a certificate of site and facility be, and hereby is, granted to Public Service Company of New Hampshire for the construction, maintenance, and operation of a nuclear generating station in Seabrook, New Hampshire; consisting of two 1,100 Megawatt nuclear electric generating units, station transformers, and associated facilities, together with associated transmission lines, at locations set forth in the following exhibits on record in the case:

<u>Item</u>	<u>Exhibit No.</u>
A. Reactors, Generators, Transformers, Cooling Water Pumps, and associated equipment	P-39 (Appendix 1)
B. Cooling Water Tunnels	P-106, Fig. 3-1 (Appendix 2) & Appendix 2A
C. Transmission Lines	P-53A (Appendix 3)

and it is

FURTHER ORDERED, that Public Service Company of New Hampshire is authorized to do business as an electric public utility, for the purposes of constructing, maintaining, and operating the generating station, associated facilities and transmission lines herein authorized, in the towns of Seabrook, Hampton, Hampton Falls, South Hampton, Danville, Kensington, East Kingston, and Kingston; and it is

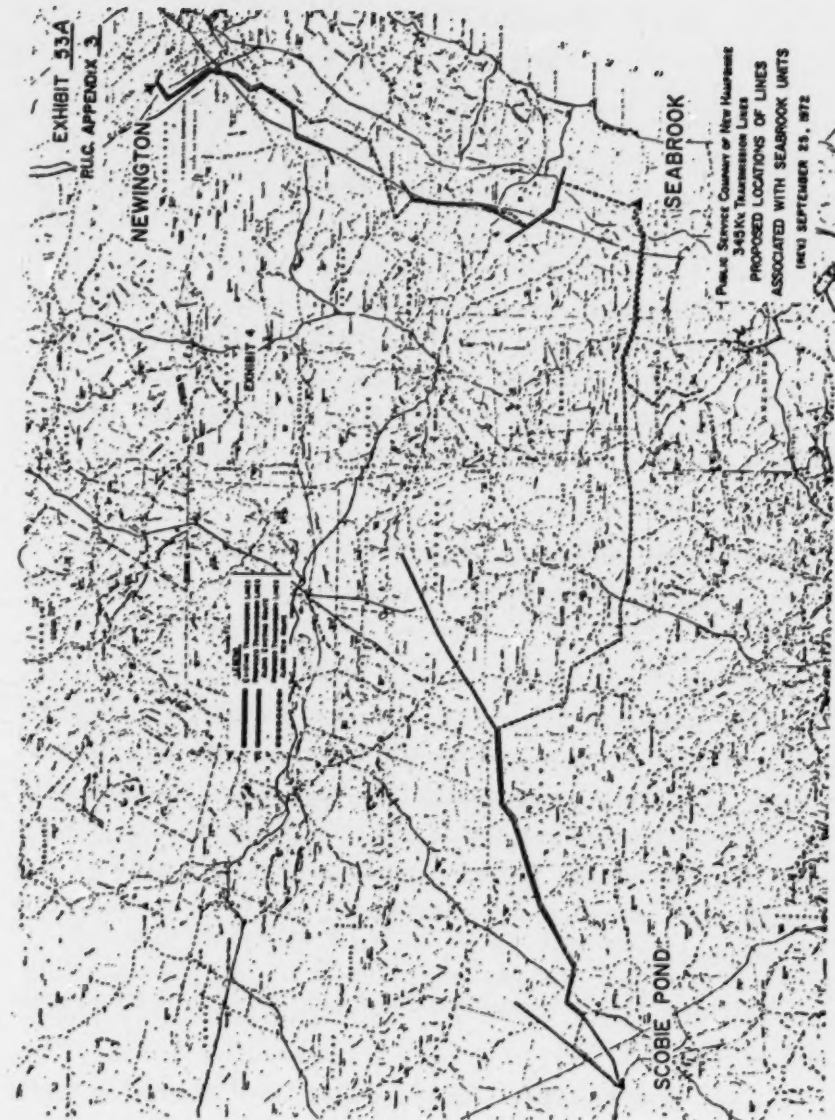
FURTHER ORDERED, that all licenses and/or permits referred to in the foregoing report are granted, or are to be granted, as specified, thus constituting compliance under RSA 162-F:8 II that all State standards and requirements

shall be met by the applicant as a condition of granting the certificate of site and facility; and it is

FURTHER ORDERED, that the authority granted herein be, and hereby is, conditional upon the applicant obtaining the necessary construction and operating permits and/or licenses from the U. S. Atomic Energy Commission.

By order of the Public Utilities Commission of New Hampshire this twenty-ninth day of January, 1974.

DOM S. D'AMBRUOSO
Secretary



PUC APPENDIX 6

**MINUTES OF MEETING OF
SITE EVALUATION COMMITTEE**

JULY 27, 1973

Pursuant to a notice given to each member of the Site Evaluation Committee, the Committee met at the Conference Room of the New Hampshire Water Supply and Pollution Control Commission, Prescott Park, 105 Loudon Road, Concord, New Hampshire. Chairman William Healy presided. The meeting commenced at 9:00 a.m. All committee members were present: William Healy, Terence Frost, George T. Gilman, Bernard Corson, Mary Louise Hancock, George McGee, Forrest Bumford, Gerard Zeiller, George Hamilton, Theodore Natti, Alexander J. Kalinski and Edmund L. Barker.

The Committee met in Executive Session from 9:00 a.m. until 2:10 p.m., at which time the meeting was opened to the public.

When the meeting was opened to the public at 2:10 p.m., the Chairman noted that all Committee members were present and that counsel to the Committee, Attorney Robert Chiesa, was also present and had been in attendance with the Committee during the Executive Session. The Chairman also noted that the meeting had been duly noticed and posted, and also that all interveners had been given notice of the hearing.

Chairman Healy then read the Legal Notice of this meeting in its entirety.

George McGee made a motion that the Committee make the following findings:

WHEREAS, the New Hampshire Legislature has recognized the present and predicted growth in electric power demand in the State of New Hampshire by its enactment of RSA

162-F, as inserted by Chapter 357, Laws of 1971, "An Act Relative to the Establishment of an Electric Power Plant and Major Transmission Siting and Construction Licensing Procedure"; and

WHEREAS, the Site Evaluation Committee established under this statute has before it, pursuant to the provisions of RSA 162-F the application of the Public Service Company of New Hampshire for a certificate of site and facility for its proposed nuclear electric generating facility at Seabrook, New Hampshire and its associated transmission lines; and

WHEREAS, the application of the Public Service Company was filed on February 1, 1972 and the Site Evaluation Committee held public hearings on the application commencing on June 16, 1972 and completed said hearings on May 25, 1973; and

WHEREAS, the Site Evaluation Committee has viewed the site of the proposed nuclear facility at Seabrook, New Hampshire and has considered both the proposed site and the proposed location of the transmission lines associated with the plant; and

WHEREAS, the Public Service Company's application in its present form contemplates the construction of intake and discharge tunnels from the proposed nuclear facility to off-shore locations for its cooling water system; and

WHEREAS, the Site Evaluation Committee has requested and received the views of municipal and regional planning commissions and municipal legislative bodies and has duly noted and considered such views and positions and the reasons given for their respective positions; and

WHEREAS, the Site Evaluation Committee has, during the course of the hearings and proceedings on the application of the Public Service Company, employed and retained independent consultants, has received the reports and results

of studies by such consultants and investigations and has duly considered them; and

WHEREAS, certain intervenors, counsel for the public and the U. S. Environmental Protection Agency appeared and participated in the hearings and proceedings held and the Site Evaluation Committee has given their views due consideration; and

WHEREAS, the Site Evaluation Committee has received and duly considered the written information, letters and reports submitted to it by members of the public in connection with the proposed site and facility at Seabrook, New Hampshire; and

WHEREAS, the Site Evaluation Committee has duly considered all of the evidence presented with respect to available alternatives to the proposed site and facility and also the environmental impact of the site and facility and its associated transmission lines; and

WHEREAS, the Site Evaluation Committee has duly considered all of the evidence as to the effect of the proposed site and facility on esthetics, historic sites, air and water quality, the natural environment and the public health and safety;

That the Site Evaluation Committee, having considered the available alternatives to the site and facility of the proposed nuclear facility at Seabrook, New Hampshire and its associated transmission lines, and the environmental impact of the site and facility of the proposed project and its associated transmission lines,

the Site Evaluation Committee hereby finds:

1. That it has given due consideration to the views of municipal and regional planning commissions and municipal legislative bodies concerned with the site and facility of the proposed nuclear project at Seabrook, New Hampshire and its associated transmission lines and that the site and facility of the proposed nuclear project at Seabrook, New Hampshire

and its associated transmission lines will not unduly interfere with the orderly development of the region.

2. That the site and facility of the proposed nuclear project at Seabrook, New Hampshire and its associated transmission lines will not have an unreasonable adverse effect on esthetics, historic sites, air and water quality, the natural environment and the public health and safety.
3. The Site Evaluation Committee further requires that the Public Utilities Commission shall incorporate in its certificate such lawful terms as will be supplied to it by the state agencies having permit or license granting responsibilities under state law concerning the site and facility of the proposed nuclear project at Seabrook, New Hampshire and its associated transmission lines.

The motion was seconded by Gerard Zeiller.

Chairman Healy read the motion in its entirety.

There was no discussion on the motion and the Committee proceeded to a vote.

Those voting in favor of adopting the motion were George T. Gilman, George McGee, Forrest Bumford as Director of the Radiation Control Agency and as Executive Secretary of the Air Pollution Control Commission (two votes), Gerard Zeiller, Alexander J. Kalinski, Theodore Natti and Edmund Barker.

Those voting in opposition to the adoption of the motion were Terence Frost, Bernard Corson, Mary Louise Hancock and George Hamilton.

The Chairman ruled that the motion had been adopted by eight votes in favor to four votes opposed. Chairman Healy noted that had he voted, he would have voted in favor of adopting the motion.

There being no further business to come before the Committee, the meeting was adjourned at 2:20 p.m.

A copy of the Legal Notice of this meeting is attached hereto and incorporated herein by reference.

**NEW HAMPSHIRE BULK POWER SUPPLY
SITE EVALUATION COMMITTEE**

LEGAL NOTICE

In accordance with the provisions of New Hampshire Revised Statutes Annotated, Chapter 91-A, Section 2, the New Hampshire Bulk Power Supply Site Evaluation Committee hereby gives notice that it will hold a scheduled meeting at 2 p.m., on Friday, July 27, 1973 at the offices of the N. H. Water Supply and Pollution Control Commission, Prescott Park, 105 Loudon Road, Concord, New Hampshire, for the purpose of taking action on the following matter:

D-SF 6205 Application of Public Service Company of New Hampshire for a Certificate of Site and Facility to Construct a Bulk Power Supply Facility and Associated Facilities at Seabrook, New Hampshire, and

Public Service Company of New Hampshire Petition for authority to operate as a public utility in the Towns of Seabrook, Hampton, Hampton Falls, South Hampton, Exeter, Stratham, Kensington, East Kingston, and Kingston, for the purpose of building maintaining and operating a 2200 MW Nuclear Generating Station, consisting of two 1100 MW units, and associated transmission lines.

An Executive Session of the Committee will take place on Friday, July 27, beginning at 9 a.m. for the purpose of discussion by the members of the Committee, at the same location as above meeting.

Dated this twelfth day of July, 1973.

WILLIAM A. HEALY, Chairman
N. H. Bulk Power Supply Site
Evaluation Committee

PUC APPENDIX 9

**STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION**

Date: December 21, 1973

At (Office): Department of Public
Works and Highways

From: ROBERT H. WHITAKER, Commissioner

Subject: Power Line Crossing of State Highways

To: MR. EDMUND L. BARKER
Chief Engineer
N. H. Public Utilities Commission
26 Pleasant Street
Concord, New Hampshire 03301

D-SF6205

Dear Sir:

Reference is made to Public Service Company of New Hampshire's amended petition to cross state maintained highways with 345KV electric transmission lines associated with Seabrook generating station.

The proposed crossings shown on Exhibits 62 (copy attached) and 61-A (revised September 25, 1972) have been reviewed and preliminary approval is hereby granted subject to the following provisions:

1. The Company shall not locate any poles or structures within the existing right-of-way.
2. The Company should provide at least 350-foot spans at the following locations, as shown on Exhibit 62 to allow for future improvements.

Identification No. on Exhibit 5	Highway Route No.	Municipality
A 1	1	Seabrook
B 6	1	Hampton
C 1	1	Seabrook
O 21	125	Kingston
C 22	111	Danville

3. The vertical clearance above the highway shall be 40 feet or more for all highway crossings.

Licenses for the above mentioned crossing of State maintained highway will be granted in the normal manner after the crossings are installed, provided the petitions for licenses are submitted and the installations are made in compliance with the foregoing provisions.

Very truly yours,

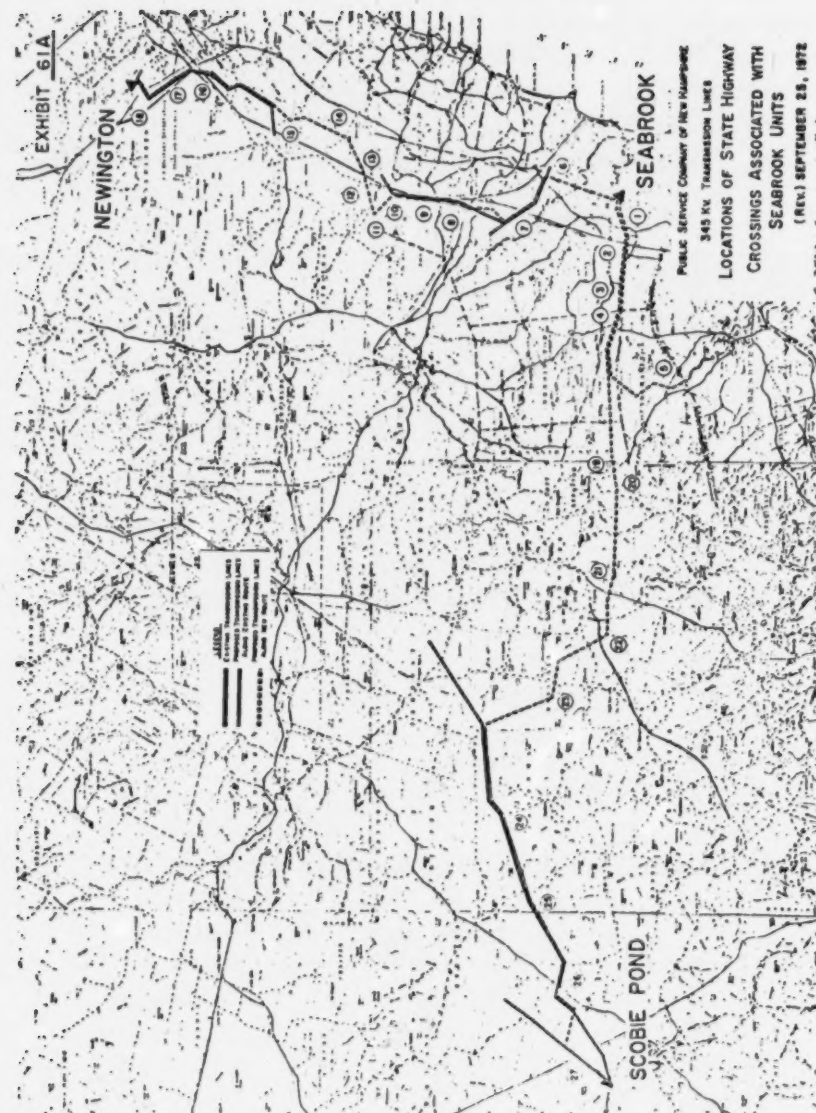
R. H. WHITAKER, P. E.

RHW/RAH/dpa
Attach.

EXHIBIT 62

PETITION FOR LICENSES TO CROSS STATE-MAINTAINED HIGHWAYS WITH 345 KV ELECTRIC TRANSMISSION LINES (Continued)

Identification Number on Exhibit 5	Highway Route Number	Municipality
I. TRANSMISSION LINES ASSOCIATED WITH THE SEABROOK SITE		
A. Transmission Line From Seabrook to Massachusetts Line:		
1	1	Seabrook
2	Interstate 95	Seabrook
3	107	Seabrook
4	150	Kensington
5	107A	South Hampton
B. Transmission Line From Seabrook to Newington:		
6	1	Hampton
7	Interstate 95	Hampton
8	Exeter-Hampton Expressway	Hampton
9	101D	North Hampton
10	Walnut Avenue	North Hampton
11	Winnicut Road	North Hampton
12	151	North Hampton
13	Interstate 95	North Hampton
14	Breakfast Hill	Greenland
15	Ocean Road	Portsmouth
16	Interstate 95	Portsmouth
17	16	Portsmouth
18	4	Portsmouth
C. Transmission Line From Seabrook to Londonderry:		
1	1	Seabrook
2	Interstate 95	Seabrook
3	107	Seabrook
4	150	Kensington
19	107A	E. Kingston
20	108	E. Kingston
21	125	Kingston
22	111	Danville
23	111A	Danville
24	121A	Sandown
25	121	Chester
26	102	Derry
27	Bypass 28	Derry



PUC APPENDIX 10

STATE OF NEW HAMPSHIRE SPECIAL BOARD

P-171 Public Service Co. — Seabrook — Transmission Lines —
Motion approved by the Special Board on December 18, 1973.

That the application of Public Service Company of New Hampshire to this Board in its Docket No. 3171 for permission to dredge and fill pursuant to RSA 483-A in the course of the construction of the associated transmission lines forming a part of the Company's Seabrook Project reviewed by the Site Evaluation Committee in its Docket No. D-SF-6205, in accordance with plans submitted on November 30, 1973 to this Board and as otherwise presented to the Site Evaluation Committee, be and hereby is granted subject to the following terms and conditions:

1. That the Company submits construction plans, including construction methods and proposed access routes in areas under the jurisdiction of the Special Board, for the transmission lines as they are from time to time completed for review and approval, modification or rejection by this Board at least 30 days prior to the commencement of construction.
2. That the Company, in cooperation with the Board, so locate the transmission lines within the routes approved by the Site Evaluation Committee in its findings made on July 27, 1973 and so carry out construction of said transmission lines as to reasonably minimize the effects thereof upon the areas subject to the jurisdiction of this Board which will be affected by the construction thereof.
3. That the Company furnish to the Board from time to time upon request, such information as may be required so that this Board may properly exercise its jurisdiction under RSA 483-A.

GEORGE M. MCGEE, SR.,
Chairman

ALAB-247

**UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION**

**ATOMIC SAFETY AND
LICENSING APPEAL BOARD**

ALAN S. ROSENTHAL, Chairman

DR. JOHN H. BUCK, Member

RICHARD S. SALZMAN, Member

In the Matter of
**THE DETROIT EDISON
COMPANY**

(Greenwood Energy Center,
Units 2 and 3)

Docket Nos. 50-452
50-453

DECISION

December 20, 1974

MR. HARRY H. VOIGT, Washington, D.C., argued the cause for the applicant, the Detroit Edison Company; with him on the brief was MR. MICHAEL B. BARR, Washington, D.C.

MR. FRANK G. GIAMBRONE, Mount Clemens, Michigan, and MS. BERTHA A. DAUBENDIEK, Avoca, Michigan, for intervenor, the Michigan Nature Association.

MR. WILLIAM MASSAR argued the cause and filed a brief for the Atomic Energy Commission Regulatory Staff.

Opinion of the Board by Mr. Salzman, in which Mr. Rosenthal joins.

This proceeding was convened before the Atomic Safety and Licensing Board to consider the Detroit Edison Com-

pany's application for a permit to construct two nuclear generating units. Over the applicant's objection, the Licensing Board ruled in the course of the proceeding that it had jurisdiction "to (1) consider the environmental effects of offsite transmission lines associated with [the] nuclear power plant, and (2) impose conditions concerning the routing, design, and construction of such lines." At the applicant's request, on October 1, 1974 the Board referred that ruling to us for review. See 10 C.F.R. § 2.730(f) (1974 rev.).

For purposes of this interlocutory matter the salient facts are these: The applicant proposes to build two nuclear generating units in Greenwood Township, St. Clair County, Michigan, on property it has named the Greenwood Energy Center, where it has a third, oil-fired generating plant already under construction. To connect the new facilities with the existing power grid, the applicant plans to erect high-voltage transmission lines along a ninety mile right-of-way up to 430 feet wide, which it must acquire either by purchase or condemnation.¹ One of those lines would traverse "Red Wing Acres", a Michigan Nature Association wildlife sanctuary in St. Clair County, Michigan. The Association has intervened to fight that aspect of applicant's plans.

The regulatory staff urged the Licensing Board to condition the applicant's construction permit on rerouting the transmission lines around intervenor's wildlife sanctuary, absent some other accommodation of the intervenor. The applicant challenged the Board's (and the Commission's) right to impose any such condition. It took the position that the location of transmission lines is entirely outside the scope of the agency's authority. As noted, the Board rejected that contention. It ruled that under the National En-

¹ Greenwood Energy Center Units 2 and 3, Applicant's Environmental Report, Construction Permit Stage, § 3.9; App. 3B, figure 2. See also AEC Draft Environmental Statement, Docket Nos. 50-452 and 453, p. 3-24.

vironmental Policy Act of 1969² (referred to as "NEPA") it may require the applicant to minimize environmental damage as a condition of allowing construction of the nuclear facility, and held that if repercussions harmful to the surroundings through which it passed could be lessened by shifting the path of a proposed new transmission line to the facility, the construction permit could be conditioned upon that rerouting. The Board viewed such lines as an integral part of nuclear generating plants, observing that "[a] power plant without transmission lines is like an airplane that can't fly." Accordingly, it held that it would not be discharging its NEPA responsibilities fully were it to "blink the environmental impacts of [the] transmission lines."

The Board's ruling touched only on the Commission's authority to condition a construction permit on rerouting transmission lines; the ruling did not determine whether such a condition is called for in this case. That determination turns on disputed facts subject to proof at future hearings.³

We accepted the reference of the Licensing Board's rulings because they present a legal issue of first impression and, perhaps more importantly, because their prompt resolution is significant for proceedings involving all facilities needing new power lines for their commercial operations.

I

The Atomic Energy Act makes it unlawful to build or operate a commercial nuclear power generating facility without first obtaining a Commission license to do so. 42 U.S.C. §§ 2131-33 (1970). Licenses for such "utilization fa-

² 42 U.S.C. §§ 4321 *et seq.* (1970).

³ The present state of the record reflects no agreement on either the character of intervenor's nature sanctuary or the cost of rerouting the transmission lines. See, *e.g.*, Applicant's Brief, pp. 3-6; Michigan Nature Association's brief, *passim*.

cilities" may be granted by the Commission "subject to such conditions" it believes necessary to carry out the purposes of the Act. 42 U.S.C. § 2133(a). Before the National Environmental Policy Act became effective on January 1, 1970, "Congress [had] viewed the responsibility of the Commission as being confined [under the Atomic Energy Act] to scrutiny of and protection against hazards from radiation," and the Commission was not expected to freight construction permits or operating licenses with conditions to guard against non-radiological disruptions of the environment. *New Hampshire v. Atomic Energy Commission*, 406 F.2d 170, 175 (1st Cir.), certiorari denied, 395 U.S. 962 (1969).

NEPA's enactment substantially broadened the environmental responsibilities of the Federal Government by making the policies of that Act "supplementary to those set forth in existing authorizations of Federal agencies." 42 U.S.C. § 4335. The Atomic Energy Commission was not excepted. In a landmark decision, the District of Columbia Circuit ruled that "NEPA, first of all, makes environmental protection a part of the mandate of every federal agency and department," and that the "sweep of NEPA is extraordinarily broad, compelling consideration of any and all types of environmental impact of federal action." *Calvert Cliffs Coord. Com. v. United States Atomic Energy Commission*, 449 F.2d 1109, 1112, 1122 (1971). That ruling has been accepted and applied in weighing whether to permit such activities as filling tidelands, bridging streams, guarantying loans, raising rates, or abandoning railroads. In making those decisions, it is settled that the responsible federal officials must place in the balance, in addition to all the usual economic and technological considerations, the consequences their actions will entail for the people and places they affect.⁴ In short, every federal agency — includ-

⁴ See, *e.g.*, *Zabel v. Tabb*, 430 F.2d 199 (5th Cir. 1970), certiorari denied, 401 U.S. 910 (1971); *Harlem Valley Transportation Ass'n v. Stafford*, 500 F.2d 328 (2nd Cir. 1974); *Sierra Club v. Lynn*,

ing this one — is obliged to evaluate the “reasonably foreseeable environmental impact” of its proposed actions. It must then decide in light of those ramifications whether any given action should be allowed to go forward. *Scientists’ Inst. for Pub. Info., Inc. v. Atomic Energy Com’n*, 481 F.2d 1079, 1091-92 (D.C. Cir. 1973).

Manifestly, high-voltage transmission lines supported by a parade of towers up to 140 feet high along a 90 mile right-of-way 430 feet across will not enhance the natural ambience of the countryside.⁵ Nevertheless, the applicant insists that law and public policy “dictate that the Commission refrain from any consideration of the environmental effects of [those] transmission lines” in this proceeding.⁶ Were the applicant correct, the Commission may — indeed must — test the environmental impact of every other aspect of the proposed facility, but the fruit of the lines would be forbidden knowledge. We cannot agree.

1. Applicant first contends that the transmission lines in question are not directly related to the Greenwood nuclear facility. It suggests that, instead, they represent applicant’s independent obligation to erect a strengthened power grid transmission system in its service area (Br. pp. 2-3). Were this so, then our deliberations might be at an end because the lines (arguably) would not be attributable to the facility. When pressed at oral argument, however, applicant could not represent that identical power lines along identical routes would be erected irrespective of the Greenwood nu-

502 F.2d 43, 61 (5th Cir. 1974); *S.C.R.A.P. v. United States*, 371 F.Supp. 1291 (D.D.C. 1974) (three-judge court); *City of New York v. United States*, 337 F.Supp. 150 (E.D.N.Y. 1972) (three-judge court) (per Friendly, C.J.); Council on Environmental Quality, Third Annual Report (1972) pp. 224-30.

⁵ As we have but recently had occasion to observe. See *Northern Indiana Public Service Company* (Bailly Generating Station, Nuclear-1), ALAB-224, RAI-74-8, 244, 268 (August 29, 1974).

⁶ Applicant’s Brief, p. 7.

clear facility. (App. Tr. pp. 12-16.) In these circumstances, we have no hesitation in concurring in the Licensing Board’s assumption that the lines are a foreseeable consequence of licensing construction of the nuclear power units. Indeed, no other conclusion is reasonable. Without transmission lines the Greenwood facility would be little more than a very expensive double boiler serving no discernible purpose. It is scarcely likely that Detroit Edison would embark upon such an enterprise even if given the green light by the regulatory bodies which oversee its operations.⁷

2. Applicant’s second contention — the one it presses most forcefully — is that transmission lines are in any event outside the Commission’s regulatory jurisdiction. As we understand applicant’s position, it does not deny (as it manifestly cannot) that the Commission has “jurisdiction” under the Atomic Energy Act to pass upon its request for permission to build commercial nuclear power reactors, *i.e.*, “utilization facilities.” 42 U.S.C. § 2133(a). Nor does the applicant dispute that the Commission is authorized to condition that permit upon such terms as it deems necessary “to effectuate the purposes and provisions” of the Act. *Ibid.* The applicant, however, reads Section 11 of the Act defining “utilization facilities” as excluding transmission lines; finds acceptance of that reading in the Commission’s own regulations; and sees further confirmation in Section 271, which it construes as reserving jurisdiction over transmission lines to other agencies.⁸

⁷ The issue before us being one of the agency’s jurisdiction, we need not decide at what point these transmission lines are no longer fairly attributable to the nuclear generating facility. Such an issue could in any event only be resolved after a full evidentiary hearing, our dissenting colleague’s contrary views notwithstanding. See Part II, *infra*.

⁸ Section 11, 42 U.S.C. § 2014 (ce) (1970), provides: “The term ‘utilization facility’ means (1) any equipment or device, except an atomic weapon, determined by rule of the Commission to be capable of making use of special nuclear material in such quantity as to be

The applicant reads far too much into the statutory term "utilization facility." In Section 11, the legislative draftsmen were concentrating on specifying those structures which may not be built without prior approval, not enumerating the terms and conditions under which construction might be authorized. The latter was done in another provision of the Act, Section 103, 42 U.S.C. § 2133. As we have noted, Section 103 grants the Commission the right to subject construction permits to appropriate conditions "to effectuate the purposes and provisions" of the Act. That broad grant of authority is not limited to conditions applicable within the boundaries of a nuclear facility site or touching some structures and not others. Congress is well versed in language to restrict an agency's power to impose license conditions. See, e.g., *Zuber v. Allen*, 396 U.S. 168 (1969). No such limitations relevant to this case are found in the Atomic Energy Act.⁹ This is not surprising, given

of significance to the common defense and security, or in such manner as to affect the health and safety of the public, or peculiarly adapted for making use of atomic energy in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public; or (2) any important component part especially designed for such equipment or device as determined by the Commission."

The pertinent Commission regulations cited by the applicant are 10 C.F.R. § 50.2(b) (1974 rev.), defining a "utilization facility" to mean "any nuclear reactor other than one designed or used primarily for the formation of plutonium or U-233," and 10 C.F.R. § 50.2(k) (1974 rev.), defining a "nuclear reactor" as "an apparatus, other than an atomic weapon, designed or used to sustain nuclear fission in a self-supporting chain reaction."

Section 271, 42 U.S.C. § 2018, (1970), provides: "Nothing in this chapter shall be construed to affect the authority or regulations of any Federal, State, or local agency with respect to the generation, sale, or transmission of electric power produced through the use of nuclear facilities licensed by the Commission: *Provided*, That this section shall not be deemed to confer upon any Federal, State, or local agency any authority to regulate, control, or restrict any activities of the Commission."

⁹ Such limitations as are imposed by the statute on the Commission's authority in this respect relate to the class of persons who

the fact that Congress gave the Commission a wide mandate to advance the commercial possibilities of atomic power to the extent consistent with the protection of the public health and safety. When faced with analogous arguments to limit a regulatory agency's authority by reading its basic statute narrowly, Justice Frankfurter wrote in *Phelps Dodge Corporation v. N.L.R.B.*, 313 U.S. 177, 194 (1941), that a statute expressive of a major public policy

must be broadly phrased and necessarily carries with it the task of administrative application. There is an area plainly covered by the language of the Act and an area no less plainly without it. But in the nature of things Congress could not catalogue all the devices and stratagems for circumventing the policies of the Act. Nor could it define the whole gamut of remedies to effectuate these policies in an infinite variety of specific situations. Congress met these difficulties by leaving the adaptation of means to end to the empiric process of administration.

Those remarks are pertinent here. Sections 11 and 103 of the Atomic Energy Act merit a similar broad construction. Administrative responsibilities must be measured in part by the purpose for which they were conferred. *Permian Basin Area Rate Cases*, 390 U.S. 747, 774-76 (1968).

Moreover, the Commission itself has rejected the literal interpretation applicant now urges on us. In *Philadelphia Electric Company* (Peach Bottom Atomic Power Station Units 2 and 3), 4 AEC 109, 111-12 (1968), the Commission construed "utilization facility," as used in the very regulation upon which applicant relies, to encompass not only the "nuclear reactor" itself but "equipment associated with a nuclear reactor" because "such equipment can have nuclear safety significance."¹⁰ Totally apart from the deference due

may be licensed and the length of the license term. See 42 U.S.C. § 2133(b)-(d).

¹⁰ By implication, the Commission was similarly construing the statutory use of that same term.

an agency's interpretation of its own regulations and governing statute,¹¹ *Peach Bottom* is plainly correct. The Commission is under a statutory duty to grant nuclear facility licenses only to those persons who, among other things, are "equipped to observe . . . safety standards to protect health and to minimize danger to life or property." 42 U.S.C. § 2133(b). Congress was concerned with guarding against nuclear hazards attendant upon commercial nuclear power operations whatever the source of those hazards. Unless the Commission may condition licenses to reach all equipment associated with the facility, whether or not part of the "nuclear reactor" in some technical sense, it cannot reach the Congressional goal.

Of course we may not read into the Atomic Energy Act powers not conferred. But neither may we "interpret a statute so narrowly as to defeat its obvious intent."¹² We find nothing in the statutory or regulatory definitions cited by the applicant which precludes the Commission from imposing construction permit conditions which relate to transmission lines associated with the facility. To read the statute and the regulations as containing such a bar would let "literalness . . . strangle meaning." *Lynch v. Overholser*, 369 U.S. 705, 710 (1962); *Cleary v. Chalk*, 488 F.2d 1315, 1322 (D.C. Cir. 1973), certiorari denied, — U.S.—, 40 L.Ed.2d 289 (1974). It would have made little sense for Congress to have charged the Commission with responsibility for protecting the public against radiological hazards and then to have restricted the agency to precluding dangers originating on-site only. We decline to attribute such a purpose to the legislature. *Rockbridge v. Lincoln*, 449 F.2d 567, 571 (9th Cir. 1971).

¹¹ *Power Reactor Development Co. v. Electricians*, 367 U.S. 396, 408 (1961); *Udall v. Tallman*, 380 U.S. 1, 16-17 (1965); *Ehlert v. United States*, 402 U.S. 99, 105 (1971).

¹² *United States v. Braverman*, 373 U.S. 405, 408 (1963).

Moreover, as part of its licensing process, the Commission has for years set requirements for equipment off the immediate site of the facility under its "General Design Criteria."¹³ These regulations govern nuclear power plant design. Criterion 17, among other things, directs each plant to be provided with "an offsite electric power system." This must connect the existing electric power transmission grid with the electric distribution system on the site of the nuclear facility. Criterion 17 mandates that this offsite power:

. . . be supplied by two physically independent circuits (not necessarily on separate rights of way) designed and located so as to minimize to the extent practical the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions.

In other words, to ensure that power is available from outside sources to operate the reactor's safety devices in an emergency, the Commission requires electricity to be transmitted to the site on two separate power lines. Before the facility will be approved, the Commission must be satisfied that those lines are located sufficiently far apart so that if one is felled the other will not be.¹⁴ In short, the Commission now conditions construction permits on the acceptable location of power lines outside the immediate facility site. Were we to accept applicant's reading of the Atomic Energy Act, however, the Commission could no longer impose this safety requirement. An applicant could then, if it so chose, run both power lines to the site on a single set of poles. We can see no justification for reading into the authority conferred on the Commission by the Atomic Energy Act a geographic "on-site" limitation which would allow a significant safety regulation to be thus undercut.

¹³ 10 C.F.R. Part 50, App. A. The "General Design Criteria" are Commission regulations binding on applicants.

¹⁴ Indeed, applicant itself has taken cognizance of and satisfied this requirement. See PSAR § 8.2.1.3, p. 8.2-4; SER § 8.2, pp. 8-1 to 8-3.

We also must reject the applicant's argument that Section 271 of the Atomic Energy Act manifests a legislative purpose that the Commission not exercise "any jurisdiction over transmission lines associated with nuclear facilities" We agree with the staff that Section 271 was designed simply to preserve the traditional regulatory jurisdictions of other Federal, State and local agencies over the sale and transmission of electricity. There is no indication, either in the terms of the section itself or in the legislative history cited to us, that Congress intended the section to revoke the Commission's authority to protect against radiological hazards which might result from the failure of offsite transmission lines associated with the nuclear facility. Our confidence that there was no such legislative intent is strengthened by the fact that the Congressional sponsor of Section 271 was the Joint Committee on Atomic Energy. That Committee has a unique relationship with the Commission and exercises a close and continual supervision over the agency's activities. *Power Reactor Development Co. v. Electricians*, *supra*, 367 U.S. at 408; *Siegel v. Atomic Energy Commission*, 400 F.2d 778, 783 (D.C. Cir. 1968); *BPI v. Atomic Energy Commission*, 502 F.2d 424, 428 n.3 (D.C. Cir. 1974). This agency's regulations touching on the location of transmission lines were published in due course in the *Federal Register*¹⁵ and appear in the Code of Federal Regulations. They are undoubtedly well known to the Joint Committee, which has not called them into question. In these circumstances, the Commission's interpretation of the Atomic Energy Act as permitting it to issue construction permits conditioned on the proper location of offsite power lines if necessary to achieve the purposes of that Act is controlling.¹⁶

¹⁵ See, e.g., 36 *F.R.* 3256 (February 20, 1971) and 36 *F.R.* 12733 (July 7, 1971).

¹⁶ *Central West Utility Co. v. Federal Power Com'n*, 247 F.2d 306 (3rd Cir. 1957), relied on by the applicant, is not contrary

In sum, the Commission has the right to impose conditions governing offsite transmission line locations where necessary to protect the public from radiological health and safety hazards. This being so, it has comparable authorization to impose license conditions designed to ameliorate the environmental impact of those lines. The language and legislative history of the National Environmental Policy Act make clear that it is "more than an environmental full-disclosure law"; the Act was intended to effect substantive changes in agency decision making. *Environmental Defense Fund v. Corps of Engineers*, 470 F.2d 289, 297 (8th Cir. 1972), certiorari denied, 412 U.S. 931 (1973); *Conservation Council v. Froehlke*, 473 F.2d 664, 665 (4th Cir. 1973). It is too late in the day to argue that the Commission's environmental mandate is of lesser importance or shorter reach than its safety obligations. Such a contention would ignore the express Congressional directive that Federal agencies are to carry out NEPA's policies "to the fullest extent possible." 42 U.S.C. § 4332. An agency is excused from satisfying those obligations only where a statute applicable to its operations expressly prohibits it or makes full compliance impossible.¹⁷ No such impediment exists here. Therefore, where it can reasonably be foretold that licensing a nuclear plant means building new transmission lines, the environ-

authority. A divided court there held that a condition sought to be added to an FPC certificate of convenience and necessity at the behest of a customer of the certificated company was expressly precluded by a provision of the Natural Gas Act. We find no analogous prohibition in the Atomic Energy Act. Moreover, the limitation on the FPC's authority under the interpretation of the Natural Gas Act accepted by the majority in *Central West* has been questioned by other courts of appeals. See, e.g., *Michigan Consolidated Gas Co. v. FPC*, 283 F.2d 204, 221 n. 46 (D.C. Cir.), certiorari denied, 364 U.S. 913 (1960), and cases there cited.

¹⁷ *Calvert Cliffs*, *supra*, 449 F.2d at 1114-15; *Louisiana v. Federal Power Commission*, 503 F.2d 844, 875-77 (5th Cir. 1974); *Davis v. Morton*, 469 F.2d 593, 598 (10th Cir. 1972); *EDF v. TVA*, 468 F.2d 1164, (6th Cir. 1972); *Ely v. Velde*, 451 F.2d 1130, 1138 (4th Cir. 1971).

mental repercussions of those associated lines must be measured in determining whether the license should issue.

Nor is the Commission's authority restricted, as the applicant would have it, to voting the license up or down depending on whether the overall "cost/benefit ratio" is tilted against the facility by the location of its transmission lines. On the contrary, under NEPA, an agency is also obliged to minimize to the extent reasonably practicable the environmental aftermath of its actions. *Environmental Defense Fund v. Corps of Engineers*, 492 F.2d 1123, 1135 (5th Cir. 1974); *Environmental Defense Fund v. Froehlke*, 473 F.2d 346, 353 (8th Cir. 1972); Council on Environmental Quality Guidelines, 40 C.F.R. § 1500.2(b) (1974 rev.).¹⁸ As the District of Columbia Circuit has succinctly put it:

Clearly, it is pointless to "consider" environmental costs without also seriously considering action to avoid them. [*Calvert Cliffs*, *supra*, 449 F.2d at 1128.]

¹⁸ Those guidelines provide in pertinent part that the purpose of preparing an environmental impact statement is: "to provide agencies and other decisionmakers as well as members of the public with an understanding of the potential environmental effects of proposed actions, to avoid or minimize adverse effects wherever possible, and to restore or enhance environmental quality to the fullest extent practicable. In particular, agencies should use the environmental impact statement process to explore alternative actions that will avoid or minimize adverse impacts and to evaluate both the long- and short-range implications of proposed actions to man, his physical and social surroundings, and to nature. Agencies should consider the results of their environmental assessments along with their assessments of the net economic, technical and other benefits of proposed actions and use all practicable means, consistent with other essential considerations of national policy, to restore environmental quality as well as to avoid or minimize undesirable consequences for the environment." [Emphasis added.] While the Council's Guidelines are not binding on us, as the views of the agency charged with the implementation and administration of NEPA they are entitled to and have been accorded great weight. *Environmental Defense Fund v. Tennessee Valley Authority* 468 F.2d 1164, 1177-78 (6th Cir. 1972); *Scientists' Institute for Public Information, Inc. v. Atomic Energy Com'n*, *supra*, 481 F.2d at 1088; *Jones v. Lynn*, 477 F.2d 885, 889 (1st Cir. 1973); *Environmental Defense Fund*,

Our own decisions reflect that understanding. We have held that NEPA requires nuclear facilities to be designed to minimize environmental harm to the extent reasonably practicable before the final balance is struck. The cooling tower cases are a clear example. We have reiterated in those decisions that the relative environmental merits and costs of the various cooling systems be evaluated for each facility to insure "that the optimum alternative may be selected" before "[f]inally, an overall balancing of costs and benefits occurs" *Vermont Yankee Nuclear Power Corporation* (Vermont Yankee Nuclear Power Station), ALAB-179, RAI-74-2, 159, 175 (February 28, 1974); *Accord*, *Commonwealth Edison Company* (La Salle County Nuclear Station Units 1 and 2), ALAB-193, RAI-74-4, 423, 426-28 (April 15, 1974); *Cincinnati Gas and Electric Company* (William H. Zimmer Nuclear Station), ALAB-79, 5 AEC 342 (1972), and ALAB-84, 5 AEC 372 (1972). It would overturn those decisions to rule in this case that environmental damage which can be avoided at reasonable cost is nonetheless permissible, provided only that the ultimate, overall cost/benefit ratio remains favorable to a nuclear plant. Such a result is unwarranted; it would devitalize NEPA. We are neither prepared nor empowered to inter that Act.

Kitchen v. F.C.C., 464 F.2d 801 (D.C. Cir. 1972), and *Gage v. United States Atomic Energy Commission*, 479 F.2d 1214 (D.C. Cir. 1973), relied on by the applicant and our dissenting colleague compel no different conclusion. At most, those cases lend support to the proposition that NEPA mandates no action beyond an agency's primary jurisdiction. We have no quarrel with that principle. What we have determined here is that if new transmission lines must be built to serve a nuclear power facility, it is within the Com-

Inc. v. Froehlke, *supra*, 473 F.2d at 349; and *Greene County Planning Board v. Federal Power Com'n*, 455 F.2d 412, 421 (2nd Cir.), certiorari denied, 409 U.S. 849 (1972).

mission's mandate to insist that those lines be routed to cause minimal environmental disturbance insofar as it is reasonably practicable to do so.¹⁹

3. Finally, the applicant urges that considerations of "sound public policy and due regard for the orderly conduct of administrative law" require the Commission to refrain from exercising jurisdiction over transmission lines and to defer for NEPA purposes to the environmental judgments of Federal, state and local regulatory agencies with concurrent jurisdiction and greater expertise. At oral argument, however, applicant conceded that no Federal agency would review the locations of the transmission lines involved in this case. (App. Tr. 34.) In any event, the difficulty with this line of argument, as the staff points out, is that it was raised by the Commission itself in the *Calvert Cliffs* case and rejected by the court of appeals. 499 F.2d at 1122-27. As the court there noted, approval by state and local authorities does not involve the same kind of comprehensive judgment which NEPA requires of the Federal agency with overall responsibility for the project.²⁰

¹⁹ The Commission's brief in *Gage* was not to the contrary, as applicant suggests. It did no more than express an understandable reluctance to urge the resolution of difficult legal questions in the abstract. *E.g.*, "The legal questions involved in such a rule [to bar all site acquisitions in advance of Commission permission] require exploration and possible clarification against the factual background of a record." *Id.* at p. 14. We agree. See Part II, *infra*.

In *Kitchen*, the petitioners contended that construction of a local telephone exchange building needed FCC approval under the Communications Act; the Commission said it did not and the court of appeals agreed. That is of course the opposite of the case at bar, where it is conceded that a federal license is required before construction of the nuclear plant may begin. Because federal action is necessary here, NEPA applies; the converse was true in *Kitchen*.

²⁰ Whether the Commission may impose license conditions compliance with which would violate regulations of other state and local agencies is not before us, because to the best of our understanding none is suggested which would do so. *Cf.*, *Maun v. United States*, 347 F.2d 970 (9th Cir. 1965).

II

Our decision does no more than affirm the interlocutory rulings referred to us. We concur that the Licensing Board must consider the environmental effects of the transmission lines in deciding whether and, if so, under what conditions to authorize issuance of a construction permit in this case. At this juncture, however, we are not called to decide whether the applicant should be directed to reroute its lines around the intervenor's sanctuary. The optimum means of minimizing environmental harm cannot be decided in the abstract; it is a factual issue which of course turns on the circumstances of each situation. Whether it would cost the applicant the claimed half a million dollars to reroute its lines and whether the wildlife sanctuary could be duplicated nearby at lesser cost are relevant matters upon which the Licensing Board has heard no witnesses, found no facts, and made no determinations. We have every confidence that the Board will take a "hard look" at the evidence presented on those issues and decide the matter appropriately in due course.

Although we agree that the Licensing Board must make an independent determination of the best environmental solution, we stress that nothing precludes that Board from taking into account the views, recommendations, rules or policies of Federal, state or local officials interested in the routing of the transmission lines under study. Indeed, we think that giving proper respect to their concerns is part and parcel of the Board's obligation in carrying out its NEPA responsibilities.²¹

²¹ See *Calvert Cliffs*, *supra*, 449 F.2d at 1123-24.

The Licensing Board's rulings are *affirmed*.²²
It is so ORDERED.

FOR THE ATOMIC SAFETY AND
LICENSING APPEAL BOARD

RHEA M. FRAZIER
Secretary to the Appeal Board

DISSENTING OPINION OF DR. BUCK

I am in accord with the majority's position only to the extent that it permits *consideration* to be given in a licensing proceeding to the environmental effects of any transmission lines which are to be built *solely* for the purpose of serving the nuclear unit or units under consideration. I must respectfully disagree with my colleagues both as to what they apparently view as the boundaries of the Commission's authority to review the environmental impact of transmission lines, and as to the relief which the Commission may grant. And I must dissent from their conclusion that the environmental effects of transmission lines on Red Wing Acres must be considered in this proceeding.

A. My analysis — and the foundation for my disagreement with the Board's majority — begins with my view of the regulatory scope of the Atomic Energy Act, as it existed prior to the enactment of NEPA.

1. As it then existed, the Act was quite limited in scope, and the regulatory authority it conferred was narrowly circumscribed.

²² Our resolution of the important issue in this case was considerably assisted by the briefs submitted and arguments presented by the applicant and the staff. They marshalled the authorities and focused our attention on the relevant considerations. Dr. Buck joins us in acknowledging their aid.

Insofar as here pertinent, the Act contemplated the licensing of a "utilization facility" (§§ 101, 103, 42 U.S.C. 2131, 2133 (1970) which is defined as

(1) any equipment or device, except an atomic weapon, determined by rule of the Commission to be capable of making use of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public, or peculiarly adapted for making use of atomic energy in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public; or (2) any important component part especially designed for such equipment or device as determined by the Commission [§ 11cc, 42 U.S.C. 2014(cc) (1970)].

The Commission further defined the term "utilization facility" as "any nuclear reactor other than one designed or used primarily for the formation of plutonium or U-233 [an exception not here pertinent]" (10 CFR § 50.2(b)). The Commission has never by regulation included any component part within the definition, despite its statutory authority to do so.

By administrative interpretation, and later by court ruling, the Commission's licensing jurisdiction over reactors was further confined to matters affecting the common defense and security and the public health and safety (as well as certain antitrust matters not relevant to the question here in issue). Thus, in a decision which acknowledged its authority to exercise control over equipment associated with a reactor, the Commission stressed that such equipment "bears directly on the operation of the reactor", is "integral to the operation of a reactor", and may have "nuclear safety significance". (*Philadelphia Electric Co.* (Peach Bottom Atomic Power Station Units 2 and 3), 4 AEC 109, 112 (June 5, 1968)).

The limited scope of the Commission's licensing jurisdiction under the Atomic Energy Act was emphasized by the Court of Appeals decision in *New Hampshire v. AEC*, 406 F.2d 170 (1st Cir. 1969), *cert. denied*, 395 U.S. 962 (1969). There, relying on general language in the Atomic Energy Act as a basis for reading thermal pollution as a health and safety matter, a state tried to establish that the Commission had regulatory jurisdiction to consider evidence of possible thermal pollution of the Connecticut River as a result of the cooling-water discharge from the facility in question. The Court agreed with the Commission's decision that it lacked such jurisdiction. It stated that

the Congress, in thinking of the public's health and safety, had in mind *only* the special hazards of radioactivity [406 F.2d at 174, emphasis supplied].

and it went on to conclude that

in enacting the Atomic Energy Acts of 1946 and 1954, in overseeing its administration, and in considering amendments, the Congress has viewed the responsibility of the Commission as being confined to scrutiny of and protection against hazards from radiation [*id.* at 175].

2. Another factor which must be considered in ascertaining the intended scope of the Commission's pre-NEPA licensing jurisdiction is Section 271 of the Atomic Energy Act, 42 U.S.C. 2018 (1970), which provides that

Nothing in this [Act] shall be construed to affect the authority or regulations of any Federal, State, or local agency with respect to the generation, sale, or transmission of electric power produced through the use of nuclear facilities licensed by the Commission: *Provided*, That this section shall not be deemed to confer upon any Federal, State, or local agency any authority to regulate, control, or restrict any activities of the Commission.

Nominally, that section might be viewed as merely reserving for other governmental agencies any authority they

might otherwise have had with respect to transmission lines, while not precluding the Commission from concurrently exercising jurisdiction over such lines. My colleagues have so construed it (pp. 942-943, *supra*). But legislative history (arising as a result of a 1965 amendment to that section) indicates that, except with respect to radiological health and safety considerations, the Commission was given no authority to regulate transmission lines. Thus, the report of the Joint Committee on Atomic Energy stated that, in the eyes of the Act's drafters,

... the authority of [Federal, State, and local] agencies with respect to the generation, sale, and transmission of electric power produced through the use of nuclear facilities was not affected by this law; and ... AEC's regulatory control was limited to considerations involving the common defense and security and the protection of the health and safety of the public *with respect to the special hazards associated with the operation of nuclear facilities* [H. Rept. 567, 1965 U.S. Code Cong. & Admin. News 2775, 2779; emphasis supplied].

This expression by the Joint Committee was partially a reflection of the view which had just previously been expressed by a court that "electricity is electricity" — whether or not emanating from a nuclear source — and "transmission is transmission, whether the electric power is going to or coming from an AEC installation". *Maun v. United States*, 347 F.2d 970, 976 (9th Cir. 1965).¹

3. With this background, it should come as little surprise that the Commission has never attempted to read its health-and-safety licensing jurisdiction as contemplating that it specify the precise routes of transmission lines. For

¹ This decision held that transmission lines to be constructed as a part of an AEC operational project would be subject to a local zoning ordinance. As a result of this holding, Congress amended Section 271 to limit its application to licensed activities, and to add the proviso which is applicable to operational programs of the AEC.

the precise location of those routes plainly has no bearing upon "scrutiny of and protection against hazards from radiation" *New Hampshire v. AEC*, *supra*.

It is true, of course, that the Commission has specified that electric power from an existing transmission network to the site "shall be supplied by two physically independent circuits . . . designed and located so as to minimize to the extent practical the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions" (10 CFR Part 50, Appendix A, Criterion 17). Contrary to the statements of my colleagues however, this scarcely constitutes a specification of the routes of transmission lines. Rather, it represents a standard by which facilities are to be designed to assure adequate health and safety protection from special nuclear hazards. Thus, there must, for safety purposes, be two emergency sources of electricity to the site; and for safety purposes they must be so designed or located as to minimize the likelihood of their simultaneous failure. Under this criterion, an applicant is free to select those locations for feeder lines to the site which it desires — or which are consistent with state or local control — as long as the combination of such locations is consistent with the aforesaid safety criterion.

No nuclear safety implications have been found to attend the location of transmission lines which transmit electric power from the site. That being so, the commission has no Atomic Energy Act authority — and hence no subject matter jurisdiction² — to regulate such lines.

B. Continuing the analysis, I now turn to the effect of NEPA on the Commission's obligations.

² The subjects over which the Atomic Energy Act confers regulatory licensing jurisdiction are the materials and facilities specifically enumerated in the Act. See, in particular, Sections 53, 57, 101, and 103, 42 U.S.C. 2073, 2077, 2131, and 2133 (1970). See also pp. 947-948, *supra*.

1. It is incontestable that NEPA expanded the scope of the Commission's regulatory review. NEPA "makes environmental protection a part of the mandate of every federal agency"; and, in doing so, it "not only permitted, but compelled, [the Commission] to take environmental values into account". *Calvert Cliffs Coordinating Committee v. AEC*, 449 F.2d 1109, 1112 (D.C. Cir. 1971). The Commission under NEPA must "consider environmental issues just as [it] consider[s] other matters within [its] mandate" (*ibid.*, second emphasis supplied). Furthermore, NEPA duties must be complied with "to the fullest extent possible" — i.e., "unless there is a clear conflict of statutory authority" (*id.* at 1114-15).

NEPA, however, while it expanded the scope of the Commission's regulatory review, did not expand the subject matter within the licensing jurisdiction of the AEC. If a subject was not within the purview of the Commission's licensing authority prior to NEPA, it did not become so as a result of NEPA. *Kitchen v. F.C.C.*, 464 F.2d 801 (D.C. Cir. 1972). Moreover, this interpretation of NEPA has been specifically acknowledged in the context of AEC's licensing jurisdiction, where a court held that the Commission was not required to assert jurisdiction over the acquisition of land by a public utility for a nuclear power plant site, prior to that utility's application to AEC for a construction permit. The court stated that "NEPA does not mandate action which goes beyond the agency's organic jurisdiction". *Gage v. AEC*, 479 F.2d 1214, 1220 n.19 (D.C. Cir. 1973).

2. NEPA, however, is without question an environmental full disclosure law. *Monroe County Conservation Council, Inc. v. Volpe*, 472 F.2d 693, 697 (2d Cir. 1972). An agency's impact statement prepared pursuant to NEPA must "thoroughly discuss the significant aspects of the probable environmental impact of the proposed agency action". *EDF*

v. *Corps of Engineers*, 348 F. Supp. 916, 933 (N.D. Miss. 1972), *aff'd*, 492 F.2d 1123 (5th Cir. 1974).

The end result of an impact statement is to synthesize the probable significant effects of the project upon the quality of the environment in sufficient detail to enable the agency, the decisionmakers, and the public to have an informed judgment regarding the merits of the proposal [*ibid.*].

Moreover, an impact statement must include a discussion of alternatives to a proposed Federal action. 42 U.S.C. 4332(2)(C)(iii) (1970). It must present "the environmental risks incident to reasonable alternative courses of action". *NRDC v. Morton*, 458 F.2d 827, 834 (D.C. Cir. 1972). The alternatives which must be discussed "are those reasonably available", but they need not be "those which can be adopted and put into effect" by the agency issuing the statement (*ibid.*). They can be those within the purview of other governmental agencies or legislative bodies. For an impact statement

is not only for the exposition of the thinking of the agency, but also for the guidance of [other] ultimate decision-makers, and must provide them with the environmental effects of both the proposal and the alternatives, for their consideration along with the various other elements of the public interest [*id.* at 835].

I am persuaded by the *Morton* rationale that the Commission must consider alternatives to the proposal as submitted, irrespective of the fact that implementation of an alternative may lie outside the Commission's jurisdiction. In the hypothetical situation where a transmission line is proposed *solely* for the wheeling of electricity from a proposed nuclear power plant, then one alternative to the proposed licensing action which must be considered is a different route for such transmission line, as long as alternate routes are reasonably available. Such *consideration* must take place even though, under my view of the situation, the Commission has no authority to compel a licensee to adopt any particular transmission line routing.

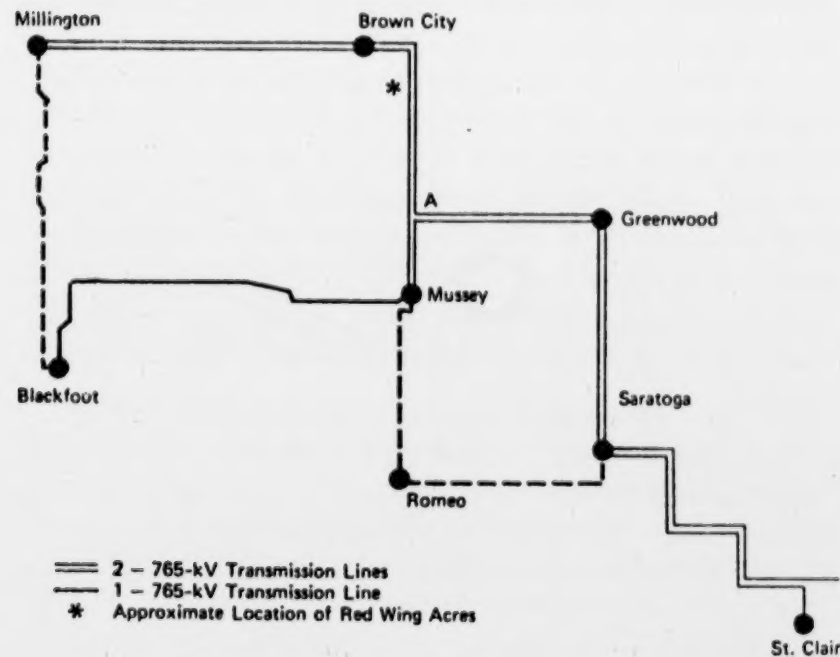
A significant premise for such consideration, however, is that the transmission line would not be built but for the location of a facility at a proposed site. For if a line is part of an existing system, or a planned system which is to be built irrespective of whether a nuclear facility is licensed, then the environmental effects of such line cannot be said to stem from the licensing of the nuclear facility.

C. The statutory framework discussed in Section A and B, *supra*, leads me to conclude that, under the Atomic Energy Act, the Commission has no authority to specify the location of transmission lines carrying power from the site; and that NEPA likewise provides no such authority to the Commission. I also conclude that, even though NEPA may require the Commission to *consider* in its impact statements (and in adjudicatory licensing proceedings) the environmental effects of transmission lines which would not have been built but for the location of a nuclear facility at a proposed site, the lines under consideration here (at least on the basis of the present record) do not appear to fall into that category. Finally, it is my view that the Commission's authority to take action as a result of such consideration as it must give to transmission lines is strictly limited, and considerably narrower than that envisaged by the majority.

1. From the present record, it appears that the transmission line proposed to be built through Red Wing Acres would be built even if the Greenwood nuclear facilities were not licensed.³ But, more important, the record illustrates the intolerable situation which can arise if the Commission

³ If the nuclear facilities are not licensed, the applicant has indicated that it will consider additional non-nuclear facilities at the Greenwood site (App. Bd. Tr. 15). The possibility that, with the substitution of nonnuclear facilities for the nuclear plant, the applicant might use 345 KV lines on the proposed right of way (*i.e.*, non-identical lines — see majority opinion, p. 939), would not substantially change the environmental effect except that two 345 KV lines would require a wider right of way than the two 765 KV lines.

attempts to exercise jurisdiction over transmission lines which (although not yet built) are intended for broader purposes than serving the nuclear units under consideration. For the Greenwood site is large enough for at least three power plants, and it is to be the location of a fossil plant as well as two nuclear units. The fossil plant is already being constructed. It will initially be used to supply power to the St. Clair area (see attached map)⁴ but could be connected to other transmission lines in the future. The requisite transmission line is under construction. In other words this site is designed as an "Energy Park" not a "Nuclear Park."



⁴ This map is an excerpt from Applicant's Environmental Report in this licensing proceeding, Appendix 3B, fig. 2. Additional clarifying notations have been added.

In accordance with its agreement with other utilities (see fn. 9, p. 955, *infra*), applicant proposes at this time to construct a ninety mile 765 KV transmission line which is designed to supply its own customers and to link up with already existing or proposed lines owned by Consumers Power Co. This new line will be linked to the Greenwood site so that facilities there can feed power to it. The intervenor, the AEC staff and my colleagues insist that the entire length of the transmission line from Millington to Brown City to Mussey and thereupon to Blackfoot, as well as the short connection to the Greenwood site (a total of 90 miles), be considered as an effect of the Federal action in licensing the Greenwood nuclear units. This is despite the fact that (at least insofar as is reflected in the present record) the line has long been proposed as part of the long range power grid (App. Bd. Tr. 98).

The position that the 90-mile length of the transmission line must be considered in this proceeding is, moreover, inconsistent with guidelines which the staff itself has promulgated. Following its practice of issuing guidelines to assist applicants in writing environmental reports, when the staff decided that some transmission lines must be considered by AEC, it included in its guideline on the "Preparation of Environmental Reports for Nuclear Power Plants" (Regulatory Guide 4.2) the subject of the environmental effects of transmission lines. Section 3.9 of that guide states:

The Environmental Report should contain sufficient information to permit evaluation of the environmental impact of transmission lines and related facilities that are to be constructed from the proposed nuclear installation to an interconnecting point or points on the existing high-voltage transmission system.

Under this guide the AEC consideration would end at the connection of the feeder line from the Greenwood site to the north-south transmission line between Brown City and Mussey (see map Point A) if that line had already been

built. No consideration therefore, could be given to the environmental effect of the remainder of the transmission line — *i.e.*, the main connecting grid from Millington to Blackfoot.

Strangely, however, because the entire line is, in this case, by change being planned concurrently with the AEC consideration of an application for a nuclear power plant, the staff chose to view the entire 90 miles of transmission line as an effect of the Federal action. No rationale for this position is apparent.

What we are faced with, therefore, is a pliant jurisdictional definition which varies depending on where and when the utility chooses to make its first connection to an existing grid, on the happenstance of timing, and, apparently on the whims of the regulatory staff. NEPA does not contemplate, let alone mandate such unwarranted and unbridled flexibility.

In my view, the short connecting link to the north-south Brown City-Mussey line is the most that may be considered in this proceeding.⁵ Red Wing Acres does not fall on the path of that link.⁶

2. As I have already stressed, I do not believe that the Licensing Board here could consider the environmental

⁵ Even this extent of AEC consideration is extremely doubtful since as we have pointed out, the Greenwood site is being developed as an energy park (see pp. 952-953, *supra*). Any or all of the power plants, fossil or nuclear, can be connected to this transmission line.

⁶ My conclusion, of course, is based on record information which has not yet been subjected to cross examination. If it should later appear that the line through Red Wing Acres would not be built but for the nuclear units, then the effects of those lines could be considered by the Licensing Board to the extent hereafter set forth (this page, text lines 6 to 19).

Prior to taking evidence on the environmental effects of any transmission lines, a board should, of course, satisfy itself that the jurisdictional facts necessary to its considering such evidence are

effects of the transmission lines on Red Wing Acres. But even if it could consider such effects (see fn. 6, this page), I also must part company with my colleagues with respect to the relief which the Board might award. As I understand it, the majority views NEPA as giving the Commission the authority to ascertain the optimum routing from an environmental standpoint of transmission lines (p. 945, *supra*), and to condition a license on the licensee's adoption of such route. I regard that course of action as patently beyond the jurisdiction of the Commission.

This follows from my view that the regulation of transmission lines as such is beyond the Commission's jurisdiction, and that its only authority to consider the impact of such lines stems instead from the NEPA obligation (as interpreted in *Morton*) to consider reasonable alternatives, albeit outside the Commission's jurisdiction to implement. The requirement to discuss the environmental impacts of such alternatives, in my opinion, scarcely gives an agency the authority to issue an order not otherwise within its regulatory jurisdiction.

This is not to say that the Commission's consideration of the environmental impacts of transmission lines — circumscribed in the way I believe is appropriate — can serve no useful purpose. For we can evaluate whether better alternative routes might be available. *Cf. Citizens to Preserve Overton Park, Inc. v. Brinegar*, 494 F.2d 1212 (6th Cir. 1974). Such discussion will serve the purpose highlighted by the *Morton* decision — it will help acquaint other governmental authorities with jurisdiction over such lines with information which can assist them in carrying out their assigned functions with respect to those lines.⁷

present — *i.e.*, it should be certain that the line in question would not be built but for the nuclear unit. If necessary, the board could conduct a "mini-hearing" to ascertain those jurisdictional facts.

⁷ Indeed it is clear that, if the impact of a transmission line being built solely for a nuclear reactor were serious enough, and

Given the Federal system in which the licensing of nuclear reactors takes place — and which is the real underlying basis for a provision such as § 271 of the Atomic Energy Act — such purpose is consistent with the accomplishment of the underlying goals of NEPA. See also § 274K of the Atomic Energy Act, 42 U.S.C. 2021(k) (1970). For the routing of a transmission line is clearly a local matter. In no way would the Commission have before it the quantity of information necessary to select, or the depth of experience necessary to evaluate, the best of the myriad of routes which a transmission line to a nuclear facility normally can follow. As the Atomic Energy Act recognizes, such matters are best left to the province of local or state governmental bodies.

Thus, as I have already noted, the Commission is not required to assert jurisdiction over the acquisition of land by a public utility prior to that utility's application to AEC for a construction permit for a nuclear facility.⁸ A utility's use of such sites and the rights-of-way necessary for transmission lines is subject to state and local laws. No matter what type of power station is proposed, local citizens have the right to object before local bodies, and subsequently the courts, either to the site or to the selection of rights-of-way for transmission lines. In the case before us several Michigan State Departments and local planning commissions were required to give approval of the site and transmission line location.⁹ Since transmission lines are de-

no alternate route is available, we could deny a license or permit for that reason. See *City of Pittsburgh v. F.P.C.*, 237 F.2d 741 (D. C. Cir. 1956).

⁸ *Gage v. AEC*, *supra*.

⁹ In applicant's Environmental Report it is noted that discussions concerning the proposed transmission line right-of-way were begun with State and local bodies in the fall of 1972. Documents on proposed and eventual approvals were obtained from the Michigan Department of Natural Resources, the Michigan Aeronautics Commission, the Michigan Department of State Highways, the

signed to carry required electricity from whatever source to the consumer, an AEC construction permit or operating license for a nuclear power plant is useless if the state refuses to allow the transmission line. On the other hand, the AEC cannot stop the utility from building transmission lines to serve a fossil plant — even the fossil plant on the Greenwood site.

That being so, it is obvious to me that the design and location of transmission lines wheeling power from a facility is *not*, and should not be, the responsibility of the AEC; and that the AEC should limit its activity in this regard to the development of information to assist state and local governments in the performance of their responsibilities. In line with my previous analysis, such inquiry by AEC which is limited to transmission lines built solely to serve a nuclear power facility, would be consistent with the NEPA direction to Federal agencies to make available to state or local governments "advice and information useful in restoring, maintaining, and enhancing the quality of the environment" (42 U.S.C. 4332(2)(F) (1970)).

D. One further comment is here in order. The result reached by the majority is that the Licensing Board is being told to look at the impact, on one particular piece of property (Red Wing Acres), resulting from transmission lines which would probably be built irrespective of the licensing of the Greenwood nuclear facility. Other factors significant in the location of transmission lines — such as their inter-

Michigan Department of Commerce, the Michigan Department of State Division of Michigan History, the Genesee County Metropolitan Planning Commission, the East Central Michigan Economic Development District and other local bodies. In addition the initial concept and approximate routing of the transmission lines and possible power sites was approved by a coordinating committee under the East Central Reliability Agreement. By this agreement Detroit Edison, Consumers Power and Ontario Hydro jointly plan unencumbered power operation and transmission lines within their contiguous service areas.

relationship with the complete power system—will of necessity be overlooked. So will their impact on other pieces of property along their route (at least in the absence of the intervention before AEC of the various property owners). In the circumstances, an AEC proceeding is obviously not the forum where these kinds of factors can properly be balanced.

STATUTES AND REGULATIONS

AEA § 11

(v) The term “production facility” means (1) any equipment or device determined by rule of the Commission to be capable of the production of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public; or (2) any important component part especially designed for such equipment or device as determined by the Commission.

(cc) The term “utilization facility” means (1) any equipment or device, except an atomic weapon, determined by rule of the Commission to be capable of making use of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public, or peculiarly adapted for making use of atomic energy in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public; or (2) any important component part especially designed for such equipment or device as determined by the Commission.

AEA § 271

Nothing in this chapter shall be construed to affect the authority or regulations of any Federal, State, or local agency with respect to the generation, sale, or transmission of electric power produced through the use of nuclear facilities licensed by the Commission: *Provided*, That this section shall not be deemed to confer upon any Federal, State, or local agency any authority to regulate, control, or restrict any activities of the Commission.

Aug. 1, 1946, c. 724, § 271, as added Aug. 30, 1954, c. 1073, § 1, 68 Stat. 960, and amended Aug. 24, 1965, Pub.L. 89-135, 79 Stat. 551.

10 CFR § 50.2(b)

(b) "Utilization facility" means any nuclear reactor other than one designed or used primarily for the formation of plutonium or U-233.

NEPA § 102

The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies of the Federal Government shall —

(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment;

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by subchapter II of this chapter, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on —

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of Title 5, and shall accompany the proposal through the existing agency review processes;

(D) Any detailed statement required under subparagraph (C) after January 1, 1970, for any major Federal action funded under a program of grants to States shall not be deemed to be legally insufficient solely by reason of having been prepared by a State agency or official, if:

- (i) the State agency or official has statewide jurisdiction and has the responsibility for such action,
- (ii) the responsible Federal official furnishes guidance and participates in such preparation,
- (iii) the responsible Federal official independently evaluates such statement prior to its approval and adoption, and
- (iv) after January 1, 1976, the responsible Federal official provides early notification to, and solicits the views of, any other State or any Federal land management entity of any action or any alternative thereto which may have significant impacts upon such State or affected Federal land management entity and, if there is any disagreement on such impacts, prepares a writ-

ten assessment of such impacts and views for incorporation into such detailed statement.

The procedures in this subparagraph shall not relieve the Federal official of his responsibilities for the scope, objectivity, and content of the entire statement or of any other responsibility under this chapter; and further, this subparagraph does not affect the legal sufficiency of statements prepared by State agencies with less than statewide jurisdiction.¹

(E) study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources;

(F) recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment;

(G) make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment;

(H) initiate and utilize ecological information in the planning and development of resource-oriented projects; and

(I) assist the Council on Environmental Quality established by subchapter II of this chapter.

Pub.L. 91-190, Title I, § 102, Jan. 1, 1970, 83 Stat. 853;
Pub.L. 94-83, Aug. 9, 1975, 89 Stat. 424.

¹ So in original.